METROPOLITAN
TRANSPORTATION
COMMISSION

2001 REGIONAL TRANSPORTATION PLAN FOR THE SAN FRANCISCO BAY AREA

Amended November 2002

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ON THE COVER

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MAP: BAY AREA METROPOLITAN TRANSPORTATION SYSTEM

(Back cover pocket)

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The Metropolitan Transportation Commission is pleased to present the 2001 Regional Transportation Plan (RTP). This long-range planning document specifies a detailed set of investments and strategies to maintain, manage and improve the surface transportation network in the nine-county San Francisco Bay Area.

MTC last updated the RTP in 1998. At that time, agency planners and forecasters had to peer 20 years into the future — into a new century and a new millennium. Three years later, having crossed the once-daunting Y2K barrier, we extend our gaze yet further into the future. Federal regulations now require that transportation plans cover a 20-plus-year time horizon. In this plan, we look ahead all the way to the year 2025.

New Directions

The plan takes account of shifts in the physical and financial landscape over the past three years. In the realm of new facilities, the BART extension from Colma to the San Francisco International Airport is on track for an early 2003 opening; 9.5 miles of light-rail extensions opened for passenger service in Santa Clara County; Caltrans completed rebuilding the massive Interstate 680/Highway 24 interchange; and the FasTrak™ electronic toll collection system was installed on Bay Area bridges, to name a few. And there also has been good news in the funding realm. In November 2000, voters in Alameda and Santa Clara counties mustered the necessary two-thirds vote to extend their half-cent sales taxes, providing $7.9 billion for new projects and programs. Earlier that year, Governor Gray Davis was successful in steering his $6.8 billion Traffic Congestion Relief Program toward passage, with $1.7 billion of the new funding slated for the Bay Area.

George Draper

Reaching Out

The 2001 edition of the Regional Transportation Plan is the product of an unprecedented two-phase public outreach campaign that included more than three dozen public workshops — a number of which were targeted at low-income communities and people of color. A series of interactive displays invited participants in first round workshops to voice their preferences and concerns via sticky dots (see above).

Thinking Outside the Box

Among the clearest and most consistent messages we received from the public was an exhortation to search for new and innovative solutions to stubborn transportation problems. In this spirit, the RTP identifies a number of areas for further MTC investigation and experimentation; several of these, as noted, already have been incorporated in this RTP. Following are some highlights, grouped according to the core RTP goals.

Mobility

- Institute reversible lanes on freeways to provide additional peak-period capacity
- Charge tolls for use of high-occupancy-vehicle lanes by single-occupant vehicles
- Raise bridge tolls during peak hours (congestion pricing)
- Allow express buses on freeway shoulders

Safety

- Deploy special incident management teams to deal with big-rig accidents

Equity

- Implement a two-year pilot program to evaluate the impact of subsidized transit passes on low-income students' school attendance (adopted in 2001 RTP)
- Establish Lifeline Transportation Network to identify adequate travel options in lower-income areas (adopted in 2001 RTP)

Environment

- Provide incentives to convert free parking to paid parking
- Enforce speed limit more strictly on high-ozone days
- Improve Smog Check program (in which cars must periodically pass a smog test)

Economic Vitality

- Establish more convenient pickup locations at airports

Community Vitality

- Pool funds from various agencies to increase incentives for transit-oriented development

At some 220 pages, this edition of the RTP is more than double the size of its predecessor — not counting supporting documents such as the environmental impact report that add even more pages to the tally. The extra heft is partially attributable to responses to public input as well as several new initiatives. For instance, system management and environmental justice emerge as key focus areas. The plan also details a Regional Transit Expansion Program that identifies which bus and rail expansion projects should receive the next round of federal "New Starts" and other discretionary grants. Low-income travelers will benefit from the plan's Lifeline Transportation Network, which is intended to provide a growing number of mobility options for those who for economic reasons cannot (or choose not to) drive. For the first time, MTC introduces the notion of performance measures that will benchmark our progress in meeting key RTP goals. And, we've tried to think outside the box, proposing to study or test a number of experimental concepts, such as converting free parking to paid parking as a way of encouraging transit use, allowing express buses on freeway shoulders, and raising bridge tolls during peak hours (see column at left).

While many of these innovations could get off the ground with minimal funding, some may encounter public resistance and will require significant consensus-building on the part of MTC, our partner agencies, and state and local elected officials.

The People Have Spoken

This RTP was developed in concert with and shaped by the most extensive public outreach effort in Commission history. More than 4,000 Bay Area residents participated during the 10-month process. The first phase of the two-part campaign consisted of 29 workshops designed to allow participants to discuss transportation and land-use values, needs and priorities; to explore why citizens are drawn to support various proposals; and to debate the merits of specific projects to be included in the RTP. The first phase also included an interactive Web survey that generated more than 1,700 responses, and a telephone poll of 1,600 registered Bay Area voters.

The second public outreach phase — which began following the August release of the *Draft 2001 Regional Transportation Plan* — included another online survey, eight more public workshops/hearings held around the region, and some 25 presentations by Commissioners and MTC staff to a wide range of public groups. The Draft 2001 RTP generated more than 400 letters and e-mail comments, plus nearly 200 responses to a second online survey.

MTC also convened its first-ever Pedestrian Safety Summit and conducted a series of meetings with four specialized working groups: the Lifeline Transportation Working Group, the Environmental Justice Advisory Group, the Performance Measures Working Group and the Regional Bicycle Plan Oversight Committee. The results of this broad public engagement are everywhere evident in the plan, from the creation of the Lifeline Transportation Network and the initiation of a Transit Affordability Study (see sidebar, page 4), to the identification of new and innovative transportation solutions (see sidebar, page 2) and the continuation of popular customer service programs, such as those listed on pages 6-7. (For more details about public outreach, see the sidebar on page 11, and refer to the supplementary reports listed in Attachment C.)

2001 RTP Highlights

In every undertaking, some accomplishments merit special mention. In the 2001 RTP, the following stand out as especially significant.

Regional Transit Expansion Program

The cornerstone of this RTP is the Regional Transit Expansion Program — adopted by the Commission as Resolution 3434 — which calls for a nearly $11 billion investment in new rail and bus projects that will improve mobility and enhance connectivity for residents throughout the Bay Area. Resolution 3434 is the successor to MTC's Resolution 1876, which was adopted in 1988 and delivered such critical improvements as the BART extensions to Pittsburg/Bay Point and Dublin/Pleasanton, the Tasman light-rail extension in Silicon Valley, and the nearly completed BART extension to San Francisco International Airport. (For a list of key projects in Resolution 3434, see the sidebar on this page; for more details, see page 69.)

Lifeline Transportation

The 2001 RTP makes a clear commitment to the development of "lifeline transportation" services aimed at enhancing low-income residents' mobility during both peak commute periods and off-peak hours. A preliminary Lifeline Transportation Network was developed following a comprehensive analysis to identify which public transit services, on a route-by-route basis, are most vital to low-income neighborhoods. MTC is now working with transit operators and other partner agencies to review the network and map plans for filling any spatial and temporal gaps that are identified. (See the sidebar on page 4 for more on this RTP initiative.)

Dino Vournas

Setting Regional Rail/Bus Priorities

Projects included in the Resolution 3434 Regional Transit Expansion Program:

- BART extensions: Fremont to Warm Springs and Warm Springs to San Jose, Eastern Contra Costa County, Tri-Valley
- BART/Oakland International Airport connector
- San Francisco Muni Central Subway (to Chinatown)
- Caltrain upgrades: electrification; extension to downtown San Francisco/ rebuilt Transbay Terminal; express service
- Santa Clara Valley Transportation Authority light-rail and bus rapid transit service: downtown San Jose to East Valley
- Altamont Commuter Express and Capitols intercity rail service expansion
- Dumbarton rail service
- Sonoma/Marin rail service
- AC Transit rapid bus (Berkeley/ Oakland/San Leandro and Hesperian/ Foothill/MacArthur corridors)
- Regional express bus service expansion

Lifeline Transportation

MTC's Blueprint for the 21st Century (see page 7) called for developing a "Lifeline Transportation Network" for low-income residents who can't afford to own and operate one car, let alone the two vehicles that many middle class families consider essential for getting to work, dropping their kids at school or day care, rushing to medical appointments, and going grocery shopping.

The program builds on MTC's existing Low-Income Flexible Transportation Program, whose "LIFT" acronym captures the intent: to boost mobility options for this population segment, particularly those people making the transition from welfare rolls to payrolls. Among the dozen projects benefiting from the first round of LIFT grants — announced in late 2000 — are van services that transport children between school and child-care or after-school programs while their parents are at work, and extended "owl" bus services to enable late-night shift workers to travel to and from jobs.

MTC's Lifeline Transportation Program would replicate these efforts around the region. As a first step, MTC has analyzed gaps in transit services — both spatial gaps, meaning areas where bus and rail service is lacking, and temporal gaps, meaning times of day when service is inadequate. At the same time, MTC is conducting a Transportation Affordability Study to identify how transportation costs can act as a barrier to low-income persons. MTC also will explore ways to overcome these barriers, working in partnership with county social services, employers, school districts and others.

Regional Bicycle Master Plan

The RTP's Regional Bicycle Master Plan defines — for the first time — a network of regionally significant bicycle routes and facilities. The plan also identifies gaps in bike routes; includes cost estimates and funding strategies for buildout of the entire network; recommends a series of activities and policies to improve bicycle/transit coordination, enhance bike security and rider safety; and identifies programs to help local jurisdictions make bicycling a convenient, safe and practical means of transportation.

Maintain the Existing Network

Because revenues are limited, a key RTP priority is to get the most out of the transportation assets we already have. Accordingly, more than 70 percent of the federal, state and local transportation funds the Bay Area expects to receive over the next quarter century will be devoted to maintaining and operating the region's existing road, highway and transit network.

As part of this commitment, the RTP provides full funding for pavement maintenance throughout the network of regionally important streets, roads and highways known as the Metropolitan Transportation System (MTS). To keep the Bay Area's existing transit network running, the RTP also provides full funding — with certain conditions — for shortfalls related to the replacement and rehabilitation of buses, railcars, transit stations and other assets.

Improve System Management

In addition to maintenance, this RTP includes strong support for harnessing the region's leading-edge technology and other operational techniques to maximize the capacity of existing street, highway and transit systems. What has come to be called a "system management" approach to transportation began to take shape in the early 1990s, when it became evident that metropolitan regions could no longer afford solely to build their way out of traffic congestion problems in terms of either dollar costs or community impacts.

System management techniques aim to boost the efficiency of the transportation network while improving travelers' access to transportation services. The Freeway Service Patrol (FSP) is a prime example of system management at work. The white tow trucks cruise up and down busy freeways during commute hours and other high-traffic periods, aiding motorists in distress, removing debris and, in the process, helping to reduce congestion and protect air quality. (The FSP and other regional system management projects are listed on pages 6-7.)

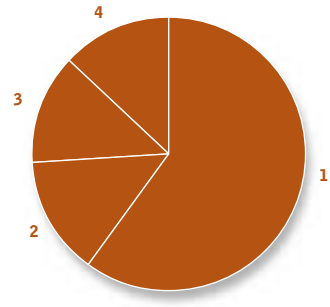
A Budget Primer

Under guidelines embodied in two landmark federal bills — the 1998 Transportation Equity Act for the 21st Century (TEA 21), and its predecessor, the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) — long-range transportation plans must be budget driven. This stipulation is tied to air quality concerns: No longer can planning organizations take credit for transit projects or carpool lanes that might be on the books and have some potential for cleansing the air, but which don't stand a chance of being built because funding is insufficient.

So what is the budget for the 2001 RTP? After looking at revenue streams from local, regional, state and federal sources — including bridge tolls, transit fares, state and federal gas taxes, property taxes, and sales taxes — MTC's planning staff determined that some $87 billion in transportation revenues will flow to the Bay Area over the next 25 years (see pie chart at right). However, the vast majority of this money, some $79 billion (amounting to 90 percent), is already spoken for, having been committed by law, local ballot measures or recent MTC programming actions. Most of this committed funding will go toward operating and maintaining the region's existing roads and transit systems, or toward rail and bus expansion projects approved by local voters. Included in this calculation is the cost of maintaining the region's highways and local roads, and the day-to day costs of operating the region's far-flung public transit network, which encompasses 9,860 miles of routes, including about 400 miles of rail transit.

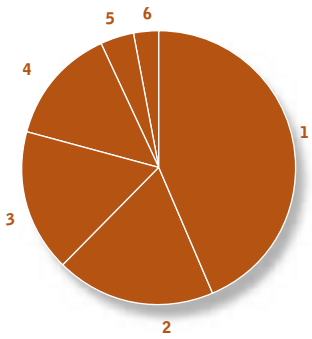
After setting aside the $79 billion for committed projects and programs, planners were left with $8.6 billion in discretionary funding that could be assigned to Track 1 — the heart of the 2001 RTP investment strategy. We'll look at how the RTP divvies up that discretionary pot in a moment. But first, let's address a point that comes up frequently in public forums. There is a perception on the part of some critics that the region is somehow favoring travel by automobiles, and underinvesting in public transit. But when you look at the entire RTP expenditure plan — both committed and Track 1 discretionary spending — the criticism couldn't be further from the facts: A full 40 percent is earmarked for transit operating costs (a category that includes drivers' salaries, fuel costs and day-to-day maintenance of vehicles); 18 percent for rehabilitation/replacement of transit vehicles, tracks and other facilities; and 19 percent for transit expansion. In all, an impressive 77 percent of the $87 billion in transportation funding flowing to the region over the next 25 years is earmarked for public transit, as compared to just 23 percent for roadway needs and other investments (see pie chart on page 6). Indeed the Bay Area leads the nation's major metropolitan areas in the proportion of overall transportation spending devoted to transit.

Projected 25-Year Revenues



		Billions of Dollars	Percent of Total
1	Local	$51.4	59%
2	Regional	14.5	17%
3	State	10.9	12%
4	Federal	10.6	12%
	TOTAL	$87.4	100%

Total RTP Expenditures



		Billions of Dollars	Percent of Total
1	Transit Operations	$35.4*	40%
2	Transit Expansion	16.4	19%
3	Transit Rehabilitation	15.9	18%
4	Roadway Maintenance and Operations	13.7	16%
5	Roadway Expansion	3.3	4%
6	Other**	2.7	3%
	TOTAL	$87.4	100%

* 36% fare revenue/64% tax subsidy

** Other includes bike and pedestrian improvements, TLC/HIP, system management, etc.

Local Needs and Regional Priorities: A Balancing Act

Like past plans, this RTP attempts to strike a balance between the need to manage and maintain the diverse elements of the Bay Area's transportation network as a single, regional system and the need to meet county-level project priorities (often endorsed by local voters). Fully 60 percent of the Track 1 pot of $8.6 billion in discretionary revenues has been earmarked for regional programs and services recommended by MTC or for projects jointly selected by MTC, Caltrans and county congestion management agencies. The remaining 40 percent of Track 1 funds has been earmarked for road and transit projects recommended by the county congestion management agencies, whose priorities are tailored to address local development patterns and community lifestyles.

One of the top regional spending priorities is backfilling the deficit for transit system rehabilitation over the next 25 years (replacing worn-out vehicles and support facilities). The remaining funds in the regional Track 1 pot are earmarked for rehabilitating roads of regional significance, the Resolution 3434 rail and bus expansion agreement, and programs that squeeze more efficiency out of — or improve access to — the transportation network, and foster smart growth.

Key regional programs included in the 2001 RTP are:

- **Transportation for Livable Communities (TLC)/Housing Incentive Program (HIP)**

MTC's TLC program provides planning and capital grants for small-scale transportation projects that enhance community vitality. The HIP grants complement the TLC grants by encouraging the construction of high-density housing adjacent to transit hubs. The RTP triples MTC's investment in this program, a measure of the plan's strong support for "smart growth" principles designed to address urban sprawl.

- **TransLink® transit smart card**

TransLink® is a universal fare card that can be used as a passport for any of the region's bus, rail or ferry systems. The RTP funds regionwide rollout of the program, which involves installation of new fare-reading equipment on hundreds of vehicles and in dozens of rail stations. (A 2002 test program will provide valuable operational data and customer feedback.)

- **Freeway Service Patrol (FSP) and call box network**

The region's fleet of 74 FSP trucks currently patrols over 400 miles of freeways and expressways, assisting motorists in distress free of charge while also clearing accidents and debris. In addition, some 3,500 call boxes provide a link to the California Highway Patrol and other emergency services.

- **TravInfo® traveler information system and other traffic management programs**

The TravInfo® telephone hotline (817-1717, shortened to 511 in December 2002), can be dialed toll-free from any Bay Area area code. The service provides real-time information on traffic congestion as well as links to transit information centers. The RTP dedicates funding to expand and enhance TravInfo®, and upgrade the infrastructure for collecting data on freeway conditions.

- **Pavement management and traffic engineering technical assistance programs**

The 2001 RTP underwrites MTC's efforts to assist cities and counties with assessing pavement conditions and prescribing effective treatments, as well as a second technical assistance program that assists cities and counties with synchronizing and modernizing traffic signals.

- **Rideshare programs**

The plan supports carpool/vanpool ridematching and employer-based commute services throughout the Bay Area.

- **Regional transit information and marketing programs**

MTC-sponsored programs aimed at building public transit ridership are also a part of the 2001 RTP. These include: the Transit Information Web Page (www.transitinfo.org), which provides route and schedule information for five dozen bus, rail and ferry operators in the Bay Area and adjacent regions; the Web-based TakeTransit℠ Trip Planner, which generates instant, detailed transit itineraries; and marketing campaigns to publicize regional transit services.

One Plan, Two Tiers

At the same time as specifying how MTC intends to spend the $8.6 billion in uncommitted transportation funding likely to flow to the region from existing local, regional, state and federal sources between now and 2025, the RTP presents a second tier of projects known as the Bay Area Transportation Blueprint for the 21st Century.

By presenting two tiers of projects and programs — Track 1, or those that can be funded with existing revenues, along with the more far-reaching Blueprint — the RTP asks, "What if?"

- What if we could restore our road, bus, rail, ferry and carpool network to mint condition?
- What if we go beyond such nuts and bolts, to close gaps in the region's bus, rail and carpool lane network?

Fueling Smart Growth

MTC launched the Transportation for Livable Communities (TLC) program in 1998, feeding it with flexible funding flowing to the region from the federal TEA 21 legislation. Initially, the program provided planning and capital grants for small-scale transportation projects that enhance community vitality — including bike and pedestrian paths, streetscapes, plazas in the vicinity of transit hubs, and the like.

In 2000, MTC added a new category to its portfolio of smart growth grant programs: the Housing Incentive Program, or HIP for short. HIP rewards cities for fostering compact housing with easy access to public transit lines. The grants are keyed to project densities — the more units per acre, the higher the grant amount. Affordable units earn a bonus. In a synergistic twist, MTC's HIP guidelines call for cities to use the incentive grants to fund more TLC-type projects.

The 2001 RTP triples TLC funding to $27 million annually. Of this, $18 million will be allocated at the regional level by MTC. The remaining $9 million per year will be allocated by the county congestion management agencies for locally determined projects that fit the TLC profile.

- What if we go a step further, and strategically expand the system so that it keeps pace with the region's growth?
- What if we could inspire legislators, the administration in Sacramento and local voters to dig a little deeper into our collective pockets to meet the Bay Area's pressing transportation problems head on?

The Blueprint began to take shape in 1999, when MTC undertook an ambitious planning effort to look beyond current funding limits, and identify the full range of projects and programs needed to provide mobility for the Bay Area in the new millennium. This effort to sketch a vision of the Bay Area's transportation future was completed in March 2000.

Encompassing about $33 billion in spending, the Blueprint proposes to first fill funding shortfalls for basic infrastructure and services. At the same time, the Blueprint includes a number of large-scale transit and highway projects that would substantially expand the network's people-carrying capacity — and help meet the 30 percent surge in travel expected over the next two-plus decades.

Already, the Blueprint has met with considerable success, helping the Bay Area to score $1.7 billion in the governor's Traffic Congestion Relief Program in 2000. The Blueprint positions the Bay Area to take full advantage of any new revenues that might flow from a major new funding mechanism — whether at the federal, state or local level.

In March 2002, after the adoption of this RTP, California voters passed Proposition 42, an amendment to the state constitution that permanently dedicates the existing state sales tax on gasoline to transportation investments, beginning in fiscal year 2008–09. This will generate about $5.8 billion in new revenues over the next 25 years — and some of these dollars could potentially fund Blueprint projects. (Note: Because Proposition 42 had not yet been passed at the time the RTP was adopted, in December 2001, the measure's $5.8 billion in projected revenues are not included in either the Committed or Track 1 portions of this RTP. These new revenues will be dealt with in the 2004 update of the RTP.)

While the extension of the sales tax on gasoline has generated considerable excitement in the transportation community, it is not the only possible funding source for the Blueprint for the 21st Century. It is likely that Contra Costa, San Mateo and San Francisco counties will pursue extensions of their special half-cent transportation sales taxes (which all expire by 2010). If the experience of Santa Clara and Alameda counties is any indication — both passed extensions of their transportation sales taxes in 2000 with more than the required two-thirds vote — success is within reach. It's also possible that the roster of

Sample RTP Projects

Listed below are some of the key road, transit and freight projects included in the 2001 RTP:

Alameda County

- BART to Warm Springs
- BART/Oakland International Airport connector
- Bus Rapid Transit (Berkeley, Oakland, San Leandro)
- I-680 Sunol Grade high-occupancy-vehicle (HOV) lanes

Contra Costa County

- Route 4 improvements
- Caldecott Tunnel fourth bore
- Richmond Intermodal Transfer Station

Marin County

- U.S. 101 HOV lanes: San Rafael gap closure
- Local bus service enhancements
- I-580/U.S. 101 interchange improvements

Napa County

- Route 29/Trancas Road interchange
- Route 12/29/221 intersection improvements

San Francisco

- Third Street light-rail extension to Chinatown (Central Subway)
- Doyle Drive replacement
- Bus Rapid Transit program
- Caltrain electrification and extension to downtown San Francisco/rebuilt Transbay Terminal

(continued on following page)

so-called "self-help" counties will ultimately include four additional Bay Area counties that have yet to pass a transportation sales tax: Marin, Napa, Solano and Sonoma. And while rising gas prices have made a regional gas tax off-limits for the moment, MTC remains committed to testing voter support for this idea when the political and economic climate improves.

Meeting Clean Air Standards

The transportation improvements in the 2001 RTP will not come at the expense of Bay Area air quality. Quite the contrary: This plan will help achieve cleaner air. A related document, the *Revised 2001 Bay Area Ozone Attainment Plan*, lays out an action plan designed to bring the region into full compliance with federal ozone standards by 2006. While Bay Area air quality is improving overall (see chart on page 10), one-hour ozone levels continue to exceed federal standards at a small number of monitoring stations in the region on a few days during the summer, mainly on hot afternoons in the inland sections of the Bay Area.

MTC and two regional agency partners — the Association of Bay Area Governments and the Bay Area Air Quality Management District — adopted the Ozone Attainment Plan in October 2001. The measures contained in the plan will reduce emissions of both volatile organic compounds and oxides of nitrogen — which react to form smog — by more than 120 tons per day in 2006. By so doing, the plan will help to further improve air quality in a region that is already in compliance with federal one-hour ozone standards over 99 percent of the time.

The Ozone Attainment Plan was approved by the California Air Resources Board in November 2001. The federal Environmental Protection Agency issued its approval of the plan's mobile source emissions budget in February 2002. Additionally, a separate conformity analysis report, approved by the Federal Highway Administration and the Federal Transit Administration in March 2002, ensures the consistency of this RTP with air quality objectives.

Works in Progress

To supplement the RTP, MTC is pursuing a number of parallel efforts to further improve the region's transportation network, including the development of additional components of the long-range plan. These components will be incorporated into future plans.

Sample RTP Projects

(continued from previous page)

San Mateo County

- Caltrain grade separations
- U.S. 101 auxiliary lanes and interchange modifications

Santa Clara County

- BART from Warm Springs to San Jose
- Light-rail extensions: Tasman, East Valley, Capitol, Vasona
- San Jose International Airport light-rail connection
- I-880 HOV lanes from Route 237 to Alameda County line
- U.S. 101 HOV lanes from southern San Jose to Morgan Hill

Solano County

- I-80/I-680/Route 12 interchange improvements
- Jepson Parkway (I-80 reliever route)
- New I-80 HOV lane segments, Fairfield to Dixon

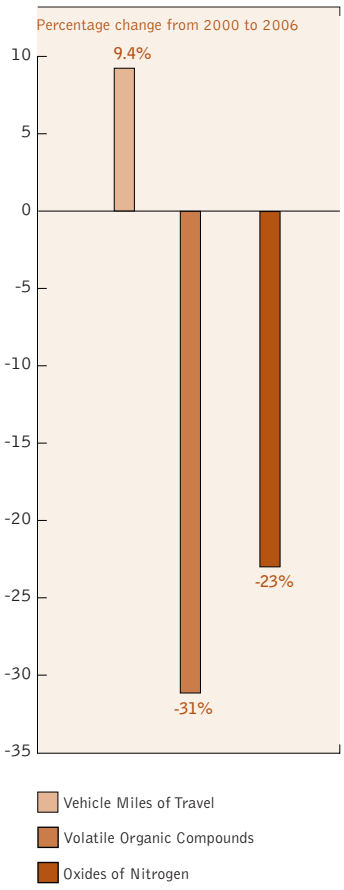
Sonoma County

- U.S. 101 HOV lanes and interchange improvements, Windsor to Petaluma
- Northwestern Pacific track improvements and other upgrades

Transbay/Multicounty

- U.S. 101 "Novato Narrows" HOV lanes from Novato to Petaluma
- Dumbarton Rail Bridge rehabilitation
- Route 12 widening (Napa, Solano)
- Capitol Corridor, ACE intercity rail improvements
- Caltrain electrification and track improvements (Santa Clara, San Mateo, San Francisco)

Air Quality Trends



Does increased auto travel equate to increased air pollution? Not necessarily. Over the next six years, emissions of volatile organic compounds and oxides of nitrogen — two precursors to ozone pollution, or smog — are predicted to drop despite a 9 percent increase in vehicle miles of travel. In fact, air quality models show the region attaining the federal ozone standard by 2006 or earlier. The good news is attributable to cleaner burning fuels and more efficient auto engines, and efforts by MTC and other regional agencies to curb emissions from both mobile sources (autos, trucks, etc.) and stationary sources such as industrial plants and processes.

State-of-the-System Report

As part of MTC's continuing effort to monitor the performance of the Bay Area transportation system, the Commission has undertaken a new initiative to better understand system performance from the customer's perspective. A comprehensive report on the "state of the system" debuts in 2002, and will be updated annually thereafter. The report assembles key facts and performance indicators from data supplied by a number of agencies. These data focus on measures of mobility, safety, usage and the overall condition of the transportation system.

Pedestrian Safety

At the same time it is working to promote bicycling as a viable transportation option, MTC is exploring ways of making streets safer for pedestrians. In early 2001, MTC established a Pedestrian Safety Task Force made up of staff from city and county planning and public works departments, representatives from law enforcement agencies, and interested citizens. MTC hosted a Bay Area-wide summit on the topic in October 2001 to generate wider public involvement in the project. The task force's preliminary findings are folded into the final 2001 RTP.

As it continues to develop a comprehensive regional pedestrian safety program, the task force is looking at what are known as the three "E"s: enforcement, education and engineering. One outcome might be a technical assistance program in which MTC deploys experts to analyze and solve local safety issues.

Regional Smart Growth Initiative

MTC and five other regional agencies are working to develop a single unifying vision for accommodating the anticipated growth in the Bay Area in a way that will reflect the Commission's commitment to promoting vital and livable communities. This includes revitalizing central cities and older suburbs, preserving open space and agricultural land, enhancing public transit, and providing more housing within the region for the Bay Area's expanding workforce.

In the fall of 2001, MTC and its partner agencies co-sponsored a series of nine public workshops around the Bay Area to stimulate discussion and gather recommendations on how public policy can best be used to pursue this "smart growth" strategy. The results of the county-level workshops were analyzed and then distilled into a trio of regionwide alternatives presented for discussion at another round of workshops in spring 2002. The goal of these workshops is to build consensus for a single vision for smart growth in the Bay Area — including identification of the regulatory changes and policy incentives needed to implement it. The 2004 update of the RTP will address the results of the Smart Growth project.

2001 RTP: Vision for Future Builds on Strong Heritage

As the product of a collaborative effort involving thousands of participants, the 2001 RTP reflects the Bay Area's diverse population and economy with a broad scope of investments and a vision for the future that combines careful stewardship of existing resources with ambitious new initiatives. While renewing commitments made in earlier regional transportation plans, the 2001 RTP also clarifies the Bay Area's strategic objectives by detailing a comprehensive Regional Transit Expansion Program that will improve mobility and connectivity in every corner of the Bay Area, and presenting a Blueprint of additional projects that can be delivered if new funds become available.

With its commitment to sustain and extend the region's existing infrastructure, enhance access by means of lifeline services for those most in need, and improve the overall operating efficiency of the Bay Area transportation network, the 2001 RTP represents a sound, innovative, inclusive transportation plan for the 21st century Bay Area. We invite you to examine it in closer detail.

Public Review: We're Still Listening

MTC welcomes input from interested citizens at all times. While the RTP is not scheduled to be updated again until 2004, the Commission will have plenty of work to do in the years to come. To stay on top of MTC activities or to keep abreast of upcoming public meetings, you can visit our Web site at <www.mtc.ca.gov>. If you can't come to a meeting, you can call our Public Information Office at (510) 464-7787, or send your comments via e-mail, fax or mail:

MTC Public Information Office
Joseph P. Bort MetroCenter
101 Eighth Street
Oakland, CA 94607
Fax: (510) 464-7848
E-mail: info@mtc.ca.gov

To order additional copies of the **2001 Regional Transportation Plan**, contact the MTC Library:

E-mail: library@mtc.ca.gov
Fax: (510) 464-7852
Phone: (510) 464-7836

The 2001 RTP also is posted on MTC's Web site: <www.mtc.ca.gov>.

The Road to the RTP: Outreach and Public Involvement

- MTC kicked off the RTP outreach with a town hall meeting in February 2001 that was attended by some 200 people.
- A video of the kickoff was distributed on 25 cable TV stations and posted on MTC's Web site.
- In the spring of 2001, MTC cosponsored 29 workshops, partnering with congestion management agencies and community groups in low-income neighborhoods as well as special interest groups catering to business, seniors and the like. At several meetings, translators were on hand to interpret for non-English speakers. Funding was provided for seven of the workshops to help community-based organizations defray the costs of hosting and publicizing the meetings. In all, 700 people attended, many of them interacting with MTC for the first time.
- In the fall of 2001, MTC conducted eight more public workshops/hearings.
- MTC developed a Web version of interactive outreach display materials, dubbing it "The RTP Challenge." Some 1,700 people took part in the Web survey conducted as part of the first phase of MTC's outreach campaign. A second online survey conducted following the August 2001 release of the Draft 2001 RTP generated nearly 200 responses.
- A consultant conducted a random-sample telephone poll of 1,600 registered voters.
- Findings from the outreach campaign were compiled into two reports. Both reports were posted to MTC's Web site and summaries of the first report in Spanish and Chinese also were posted.
- The Draft 2001 RTP generated more than 400 letters and e-mail comments.

The way the Bay Area handles growth and related infrastructure needs will be the critical test for regional planning as the new century unfolds. The success of the Bay Area economy accelerated the pace of job growth in the last decade, but housing and transportation supply were not able to keep up. Given the latest set of population and employment projections for the next 25 years, it is clear that transportation challenges will be even greater in the future as we look for more effective ways to serve the travel needs of the region's residents and employers, and the growing numbers of workers who commute to Bay Area jobs from outside the region.

To probe the dimensions of this challenge, MTC employs the latest in computer-based travel forecasting technology to determine how much travel will occur, where people will travel, and how they will travel. These tools help us understand how the investments proposed in the Regional Transportation Plan will lead to better mobility.

Population, Employment and Travel

In 2025, the Bay Area will be home to more than 8.2 million people, or some 1.3 million more people than live here today. This is unquestionably a large jump, but the 19 percent increase actually reflects a slight slowdown in the rate of population growth compared to previous decades. Renewed economic expansion is expected to create over 1.2 million new jobs in the region by 2025, a 33 percent increase. Projections for job and population growth are not in balance, however. This will lead to a net in-commute of some 300,000 workers a day from outside the region unless Bay Area housing development accelerates or fewer new jobs are created.

San Francisco and San Jose are expected to lead the Bay Area in the total numbers of new jobs created in the years ahead. But while some of the growth in population will involve infill development in established urban centers, seven out of the top 10 growth cities are located toward the outer periphery of the Bay Area, where land is more readily available (see chart at right).

Top 10 Job Growth Cities

City	2000-2020 Change
San Francisco	102,800
San Jose	99,420
Santa Rosa	43,740
Fremont	35,400
Oakland	29,450
Fairfield	29,120
Santa Clara	26,480
Pleasanton	24,540
Alameda	24,380
San Ramon	22,390

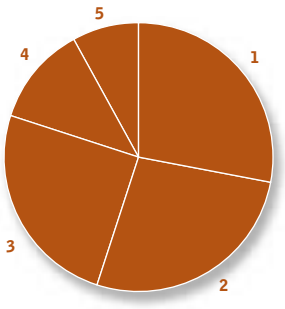
Source: ABAG Projections 2000

Top 10 Population Growth Cities

City	2000-2020 Change
San Jose	129,300
Fairfield	49,100
Oakland	37,500
Santa Rosa	36,800
Dublin	35,100
San Ramon	34,800
Antioch	31,300
Vacaville	30,300
Santa Clara	29,000
Brentwood	27,400

Source: ABAG Projections 2000

Daily Trips by Purpose in 2025



		Number of Trips	Percent of Total
1	Other*	7,376,000	28%
2	Work	7,078,000	27%
3	Shopping	6,645,000	25%
4	Recreation	3,143,000	12%
5	School	1,985,000	8%
	TOTAL**	26,227,000	100%

* In contrast to categories 2 through 5, which refer to trips that originate from the home, "Other" refers to all trips that originate from places other than home (e.g., work-based errands, etc.)

** Does not include an estimated 356,000 daily trips by commercial trucks.

A further issue is the rate of growth, since fast-paced additions of new homes and business parks can occur well in advance of the transportation facilities to serve them, as these facilities typically take a number of years to plan, design and deliver. A particularly daunting trend is the increased need for transportation improvements at the region's gateways with our neighboring counties, since triple-digit percentage population growth is projected for most of these counties in the next 40 years, according to the state Department of Finance.

Other changes in the Bay Area's demographics will have strong transportation implications as well. The number of people over age 65 will almost double by 2020, when seniors will constitute about 19 percent of the Bay Area population. Meeting the mobility needs of this sector of the population will mean changes in a number of areas, from the design of cars to funding for paratransit systems.

As an indicator of the powerful socio-economic changes occurring within California, the percentage of non-Hispanic whites will decline to just 41 percent of the total Bay Area population in 2020. This will be a drop from 61 percent in 1990. Latinos will increase to 24 percent of the Bay Area population and the combination of Asians, Native Americans and others will grow to 27 percent. The African-American population will remain steady at about 9 percent of the Bay Area total. Changing demographics could increase disparities between income groups, possibly leaving some residents without adequate travel options.

The Three-Ring Development Pattern

Transportation decisions are made within the context of emerging regional development patterns defined by local plans and development decisions. These land-use patterns can be analyzed as a set of concentric rings. At the center are the urban cores, consisting of San Jose, San Francisco and Oakland (plus Berkeley and Emeryville). Around these cities is the Bay Plain, consisting of the inner suburban communities between the Bay and the surrounding hills. The outer ring is comprised of the more distant suburbs and agricultural land that make up the rest of the nine-county region.

The outer ring will account for the overwhelming majority of new residential development in the region. The Association of Bay Area Governments (ABAG) measures this by the amount of raw land being developed for residential use. Residential density, of course, will be much higher in the urban core than in other areas. And the lion's share of the conversions of older commercial and industrial buildings to residential use will take place in San Jose, San Francisco and Oakland/Berkeley/Emeryville. But these cities combined will put only about 750 acres of now-vacant land into residential development over the next 25 years. This compares to 17,500 acres in the Bay Plain and 78,600 acres in the outer ring (see chart on next page).

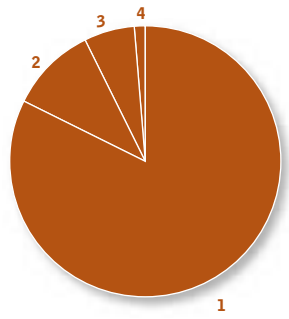
The Nature of Travel in 2025

The region's appetite for travel is propelled by many factors, including the need to get to work, attend school, shop, buy groceries, see a sports event, or catch a flight at an airport. Estimating the amount of travel that will occur in the future is a complex task that involves determining the types of trips made, the geographic origins and destinations of trips, and the travel time and cost factors that influence decisions about whether people will use a car, take transit, or bike/walk to make their trips. Every 10 years, MTC updates information on personal travel behavior by collecting key information from a sample of Bay Area households (including retired people and people who work at home). This information is then fed into computer models to evaluate changes in travel demand and overall mobility. This analysis is done both at the regional and corridor levels.

The chart at the top of the facing page shows the types of trips that Bay Area residents will make in 2025. Work trips typically define the peak demand for the transportation system because of their number, length and timing. Seasoned travelers know that it is increasingly difficult to avoid bottlenecks that regularly occur throughout the Bay Area, and the 10 worst bottlenecks (see table on page 18) affect the greatest number of travelers.

Another way to put the travel projections into perspective is to compare them to other indicators, as shown in the graph at the top of the following page. Travel activity as reflected by daily trips generally increases at a higher rate than population growth, but at a lower rate than employment growth. Powered primarily by the growth in both population and jobs, total daily person trips in the region are forecast to increase by roughly 30 percent, from about 20 million in 1998 to about 26 million in 2025. This translates into increased trips on each mode — by auto (up 27 percent), by transit (up 43 percent), by bicycle (up 27 percent), and by walking (up 46 percent).

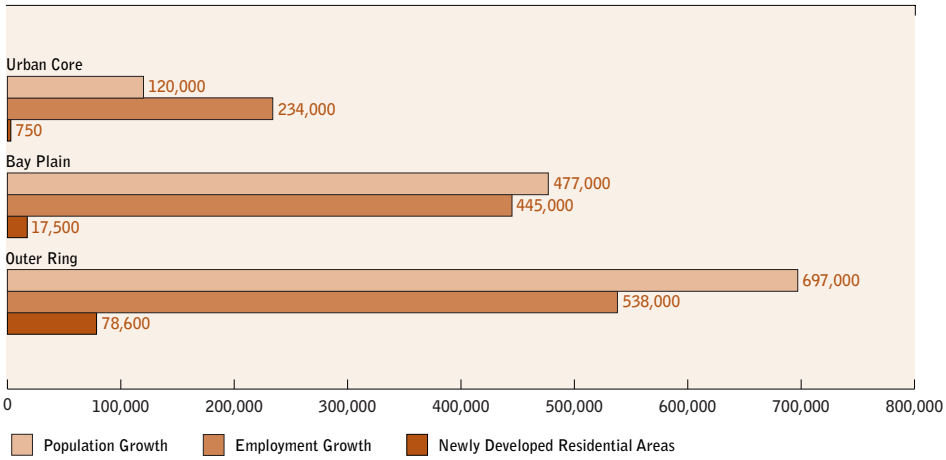
Daily Trips by Mode in 2025
Work and Non-work Trips



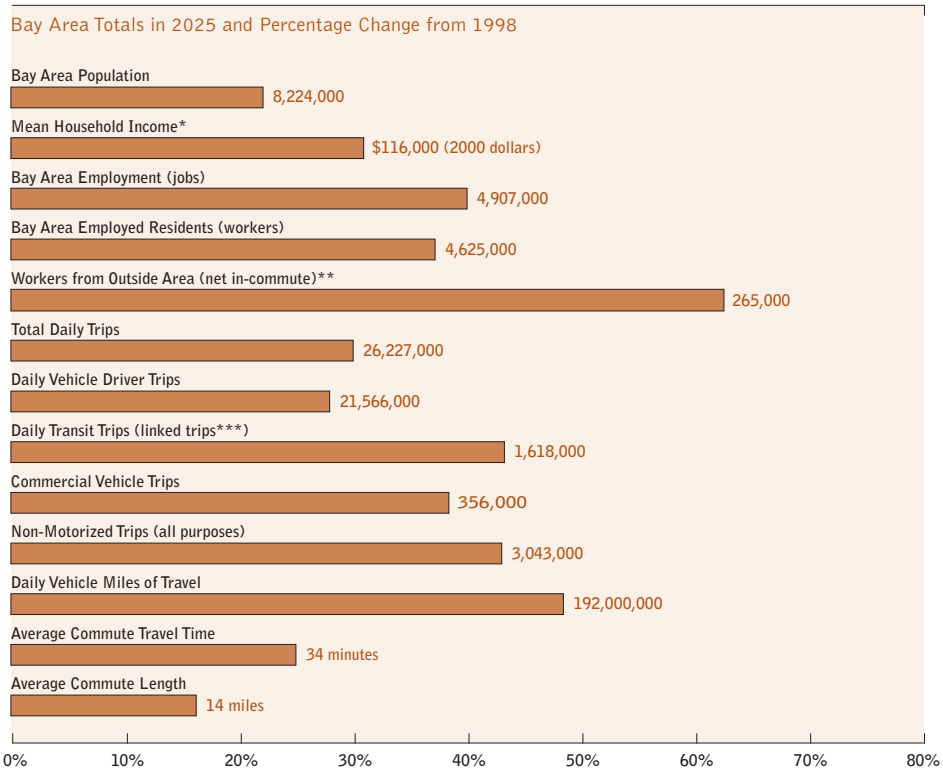
		Percent of Total Trips
1	Auto*	82.2%
2	Walk	10.3%
3	Transit	6.2%
4	Bicycle	1.3%

* Driver and passengers

Population Growth, Employment Growth and New Residential Acreage, 2000–2025

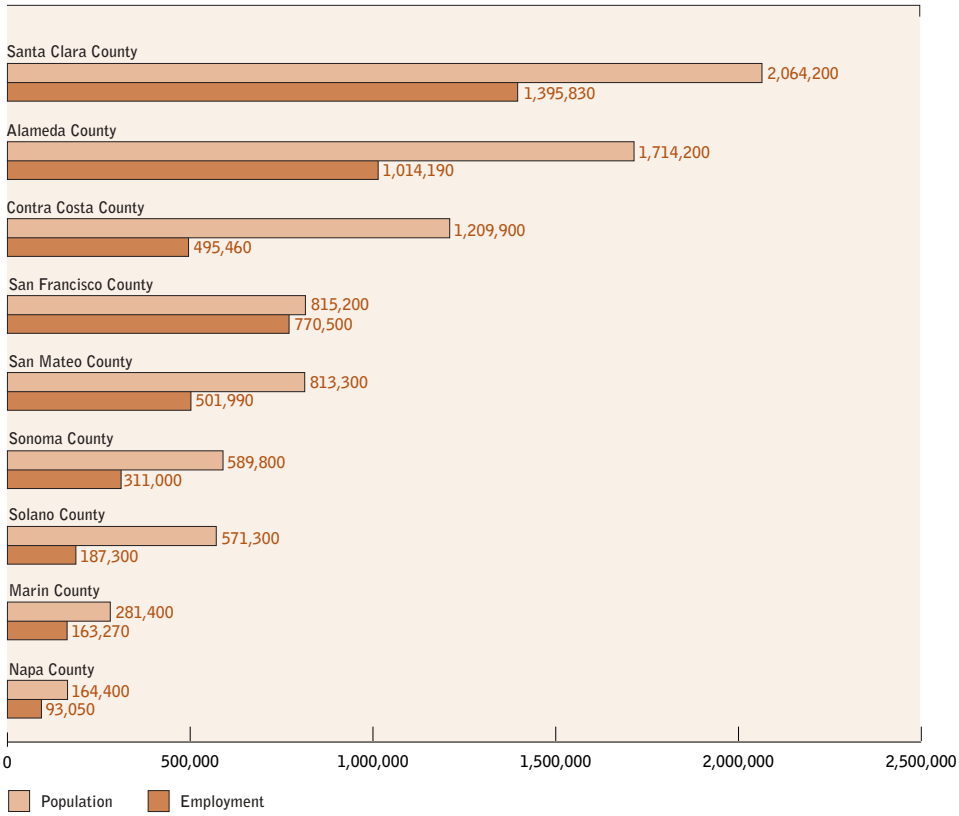


Regional Demographic and Transportation Indicators, 2025



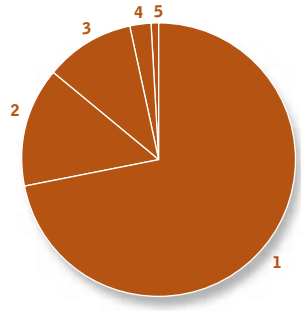
* For years 2000–2025, ** For years 2000–2020, *** Linked trips may include use of more than one transit system.

Bay Area Overview by County, 2025



Automobiles will continue to be the most popular travel mode, accounting for 82 percent of all trips (see pie chart on page 15). This figure includes work and non-work trips, and passengers as well as drivers. The combination of single-occupant vehicles and minimum two-person carpools will boost the automobile's share of all work trips in 2025 to 86 percent (see chart at right). Transit, which will account for just 6 percent of all trips in 2025, will make up more than 10 percent of all work trips. Walking will account for a smaller share of work trips than for non-work trips.

Work Trips by Mode in 2025



		Percent of Total
1	Drive Alone	71.9%
2	Carpool	14.1%
3	Transit	10.6%
4	Walk	2.5%
5	Bike	0.9%

Daily Travel Patterns

Bay Area residents crisscross the region daily in an intricate pattern of trips that is largely shaped by where people live and work. This pattern can be captured in broad strokes, but is difficult to precisely predict for a period extending out as far as 25 years. We have assembled our best estimates of these trip patterns in the chart below.

Most people's trips in 2025 will begin and end within the same county where they live. These intra-county trips now constitute 84 percent of all trips and 70 percent of work trips, and this percentage will remain remarkably stable over the next 25 years.

Work trips, as noted previously, exert the greatest pressure on regional transportation facilities and services. As the table at the top of the following page indicates, workers who live in job-rich counties will have significantly shorter commutes than workers in

Person Trips Between and Within Counties in 2025

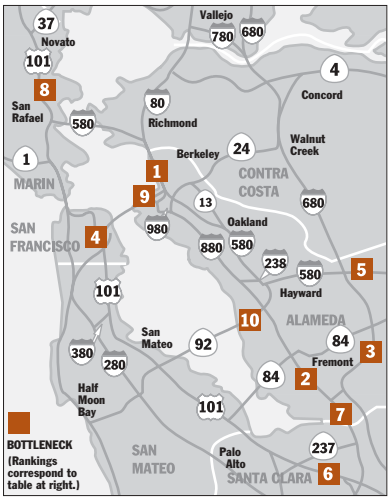
Thousands of Daily Trips in 2025 and Percentage Change from 2000

Origin/Destination	Alameda	Contra Costa	Marin	Napa	Santa Clara	San Francisco	San Mateo	Solano	Sonoma	TOTAL
Alameda	4,067	203	14	4	276	242	144	13	8	4,971
	22%	37%	62%	74%	20%	30%	25%	52%	93%	23%
Contra Costa	431	2,824	15	11	47	195	41	58	9	3,630
	36%	35%	51%	67%	37%	31%	30%	42%	86%	35%
Marin	14	10	722	3	4	107	12	4	33	908
	16%	29%	16%	63%	10%	11%	10%	39%	70%	17%
Napa	6	9	3	436	1	6	1	19	35	517
	20%	31%	45%	39%	49%	20%	21%	54%	79%	41%
San Francisco	118	36	35	2	51	2,171	269	5	7	2,694
	14%	21%	22%	59%	6%	7%	14%	38%	55%	9%
San Mateo	93	21	10	1	308	426	2,067	2	2	2,930
	27%	35%	36%	45%	16%	19%	15%	43%	52%	16%
Santa Clara	176	18	3	1	6,694	54	238	2	2	7,187
	38%	40%	45%	54%	21%	32%	25%	50%	44%	21%
Solano	52	119	13	43	7	38	14	1,301	10	1,597
	38%	47%	60%	123%	34%	37%	37%	55%	87%	54%
Sonoma	10	7	53	29	3	26	5	5	1,653	1,791
	1%	9%	17%	27%	28%	-2%	-5%	31%	39%	37%
TOTAL	4,967	3,248	868	529	7,392	3,264	2,791	1,410	1,758	26,227
	23%	36%	18%	44%	20%	12%	17%	54%	41%	24%

Numbers That Appear in Color: Rank in top 10 for growth in number of intercounty trips

Average Commute Distance in 2025

County	Distance	% change from 1998
Alameda	14.4	+19%
Contra Costa	17.3	+11%
Marin	16.4	+15%
Napa	14.4	+13%
San Francisco	9.4	+22%
San Mateo	14.2	+18%
Santa Clara	11.6	+17%
Solano	19.7	+5%
Sonoma	15.3	-4%
Bay Area Average	14.0	+16%



Four of the 10 worst Bay Area bottlenecks involve traffic into or out of Silicon Valley. Three others involve approaches to the Bay Bridge.

other parts of the Bay Area. Commutes for San Francisco residents will be particularly short, due to both the number of jobs and the density of development in the city. Santa Clara County residents will have the next shortest average commutes due to the proximity of Silicon Valley jobs. Not surprisingly, workers traveling into the region from adjacent counties typically will face the longest commutes. Within the Bay Area proper, the longest average commutes will be in Solano County, which is farther from major job centers, and in Contra Costa County. (Note: These county-level commute distance figures do not show variation within counties, where residents of central San Jose, Berkeley/Albany and Santa Rosa, for instance, typically will have shorter commutes than will other residents of Santa Clara, Alameda or Sonoma counties).

10 Worst Congestion Locations in 2001*

2001 Rank	Location	Delay in Vehicle Hours	2000 Rank
1	**Interstate 80, westbound, a.m.** — Alameda/Contra Costa County Route 4 to Bay Bridge metering lights	9,410	1
2	**Interstate 880, southbound, a.m.** — Alameda County South of Route 84 to north of Dixon Landing Road	8,880	3
3	**Interstate 680, southbound, a.m.** — Alameda County Sunol Road to south of Route 262	8,510	2
4	**Interstate 80, eastbound and U.S. 101, northbound, p.m.** — San Francisco County Army Street to west end of Bay Bridge	5,050	5
5	**Interstate 580, eastbound, p.m.** — Alameda County Hopyard Road to west of El Charro	5,030	13
6	**U.S. 101, southbound, p.m.** — Santa Clara County Great America Parkway to 13th Street	4,100	4
7	**Interstate 880, northbound, p.m.** — Santa Clara/Alameda County U.S. 101 to Dixon Landing Road	4,000	12
8	**U.S. 101, southbound, a.m.** — Marin County Rowland Boulevard to Interstate 580	3,230	6
9	**Interstate 880, northbound, a.m.** — Alameda County 1 mile north of 7th Street to Bay Bridge	2,920	10
10	**Route 84, westbound, a.m.** — Alameda County Newark to Dumbarton Bridge toll plaza	2,860	11

Source: Caltrans District 4

*Rankings are for routes in which continuous stop-and-go conditions occur with few, if any, breaks in the queue. Thus, corridors that have equally severe delays but where congestion is broken into several segments may rank lower in this type of congestion listing.

Travel Corridors

Travel corridors are geographic areas that are defined by physical boundaries and transportation systems, with each corridor having its own distinct travel pattern. The 16 corridors identified in this RTP provide the most relevant regional context for transportation planning, are well used by the traveling public, and generally have the most visible transportation projects, which are either ongoing or proposed for the future.

This RTP identifies interregional gateways as a distinct corridor for the first time. The number of commuters who travel to Bay Area jobs from residences outside the nine-county region will continue to rise as a result of the high prices and low production

rates for new housing within the Bay Area. Daily trips coming from outside the region are forecasted to increase from about 164,000 trips in 2000 to some 265,000 trips in 2020. The Altamont Pass from the Central Valley into the Bay Area is the busiest in-commute corridor and also the fastest growing, as commuters from San Joaquin, Stanislaus and Merced counties wind their way over Interstate 580 or take the Altamont Commuter Express trains. These growing in-commutes for the two peak morning hours are ranked as follows:

In-Commute Through Interregional Gateways, 1998-2025

Daily trips during two peak morning hours

Counties of Origin	1998	2025	Percent Increase
San Joaquin/Stanislaus/Merced	10,600	17,000	+ 60%
Yolo/Sacramento/Placer	9,500	16,200	+ 71%
Santa Cruz	6,600	7,000	+ 5%
San Benito/Monterey	4,400	5,800	+ 30%

Regional Screenlines

Another way to assess future travel patterns is to look at the number of trips made in either direction across regional "screenlines," that is, the number of trips crossing a particular geographic location, typically the boundary line between two counties. Many of the major transportation improvements included in this RTP are directed at trips across these screenlines, which tend to be more regional in nature.

Examples of important regional screenlines include trips on Interstate 680 over the Sunol Grade, through the Caldecott Tunnel in the East Bay, between San Francisco and the Peninsula, and across the Bay on toll bridges, BART or ferries. Each screenline is briefly discussed on the following pages in terms of the major transportation improvements under consideration and the projected growth in trips by all modes between 1998 and 2025. Growth rates for most of the screenlines exceeds the estimated average growth of 30 percent for all regional trips.

Transbay Travel Over the Bay Bridges

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
Bay Bridge Corridor (includes bridge traffic, BART and ferries)	540,000	769,000	+42.5%
San Mateo-Hayward and Dumbarton bridges	177,000	262,000	+47.8%
Richmond-San Rafael Bridge	48,000	86,000	+79.1%

Major projects include replacement of the east span of the Bay Bridge, widening the viaduct section of the San Mateo-Hayward Bridge to six lanes, and consideration of rail service over the Dumbarton railroad bridge. MTC is currently conducting the Bay Crossings Study to evaluate the long-term potential for new Bay crossings by bridge, tunnel or water with different combinations of road, rail, bus, ferry and traffic management strategies.

Bay Area Travel Corridors

San Francisco Bay Region

Golden Gate

North Bay East-West

Napa Valley

Eastshore-North

Delta

Diablo

Tri-Valley

Sunol Gateway

Eastshore-South

Fremont-South Bay

Silicon Valley

Peninsula

San Francisco

Transbay Corridors

Interregional Gateways

Peninsula

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
Between San Francisco and the Peninsula (San Mateo and Santa Clara counties)	660,000	800,000	+21.2%
Between San Mateo and Santa Clara counties	420,000	547,000	+30.0%

With the completion of BART to San Francisco International Airport and the intermodal Caltrain connection in Millbrae, the transit focus for the future will be on Caltrain improvements for north/south travel along the entire Peninsula (express service, electrification, potential downtown San Francisco extension to a rebuilt Transbay Terminal). Highway improvements will focus on the addition of auxiliary lanes along U.S. 101, as well as multiple interchange improvements.

Fremont-South Bay

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
East Bay to/from Santa Clara County	212,000	296,000	+39.6%

A major transit project under review in the Regional Transit Expansion Program is the proposed BART extension from Fremont to San Jose, linking also to the east-west light rail line serving the Golden Triangle portion of Silicon Valley. This corridor has been studied on many different occasions, and is currently undergoing a new major investment study to identify the preferred rapid transit solution.

Interstate 680 Sunol Grade

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
Tri-Valley/Central Valley across Sunol Grade	119,000	226,000	+90.1%

This corridor has been among the most congested in the Bay Area for several years, and has been the focus of intense efforts to develop new carpool lanes. Other longer-term options include increased express bus service, increased Altamont Commuter Express commuter rail service, and value pricing (under study).

Caldecott Tunnel

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
East–west trips through the Caldecott Tunnel	303,000	433,000	+42.7%

A recent study evaluated a suite of strategies for improving travel through this bottleneck, including better traffic management, improved transit, and different configurations for a new fourth bore, now proposed for construction in this RTP.

Route 4 in Contra Costa County

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
East–west trips over Willow Pass Grade	174,000	271,000	+56.4%

Improvements to Route 4 are a high priority due to eastern Contra Costa County's current and projected population growth, which exceeds transportation capacity. Carpool lane projects are being implemented along the eastern portion of the route and longer-term rail options continue to be reviewed.

North Bay to East Bay

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
Carquinez Bridge	115,000	182,000	+57.5%
Benicia-Martinez Bridge	92,000	152,000	+64.6%

Major bridge projects are or soon will be under way to replace the western span of the Carquinez Bridge and construct a new Benicia-Martinez Bridge for added capacity. Transit options, which could be developed further in the future, include the Capitol Corridor intercity rail service and express buses.

Marin/Sonoma

Screenline	Daily Trips 1998	Daily Trips 2025	Percent Increase
Local trips between Marin and Sonoma counties	67,000	86,000	+28.0%
Local trips between Marin and Sonoma counties including trips between Sonoma and San Francisco	87,000	122,000	+40.0%
Crossing Golden Gate Bridge	170,000	215,000	+26.5%

Major improvements to the U.S. 101 "Novato Narrows" section between Novato and Petaluma are being planned, along with a potential commuter rail system linking the two counties. Job growth in the North Bay is mitigating some of the demand for increased travel to San Francisco.

RTP GOALS

GOALS

Six broad policy goals have helped guide the development of this RTP:

- Mobility — improve mobility of persons and freight
- Safety—improve safety for system users
- Equity — promote equity for system users
- Environment — enhance sensitivity to the environment
- Economic Vitality — sustain the economic vitality of the region
- Community Vitality — promote vital and livable communities

In this chapter, we take a close look at these goals and the particular challenges that each presents. The safety goal is new with this RTP; the other five are longstanding MTC policy commitments. We break each goal into discrete objectives and offer ideas on how we might measure the Commission's progress toward achieving these objectives. The public input we received relative to each goal is summarized as well.

Among the clearest and most persistent messages we received was an exhortation to search for new and innovative solutions to stubborn transportation problems. In this spirit, we suggest a number of areas for MTC investigation and experimentation. At the same time, we identify the assistance or support from other transportation partners that would be needed to effectively pursue these new directions. While exploratory at this stage, we hope the most promising of these ideas can proceed toward implementation by the time of the next RTP update.

In addition to charting the Commission's own progress in meeting these RTP goals, the plan defines a complementary set of measures to gauge the performance of the entire regional transportation system as improved by the RTP projects. These system performance measures (also new with this RTP) include travel time, accessibility and user benefits. But the plan itself is no guarantee of success. Public consensus, adequate funding, technological advances, the cooperation of transportation partners — all will be required in great measure if these goals are to be attained.

TEA 21 Planning Factors

The RTP goals are derived from planning factors established by the Transportation Equity Act for the 21st Century (TEA 21) and predecessor legislation. Specifically, under TEA 21 metropolitan and statewide planning processes must consider transportation projects and strategies that will:

- Support economic vitality
- Increase transportation system safety and security
- Increase accessibility and mobility options for people and freight
- Protect and enhance the environment
- Enhance the integration and connectivity of the transportation system
- Promote efficient system management and operation
- Emphasize preservation of the existing transportation system

Improve the ease and convenience of using the transportation system

The most essential function of this plan is to support the movement of people and goods with relative ease and in a reliable manner. Strategies for ensuring mobility must consider projections of future growth and the locations where this new growth will occur; the corridors in which growth will create the greatest "demands" on the region's transportation system; the need to maintain the current transportation system even as the Bay Area experiences unprecedented demands for new improvements; and the need to coordinate and operate the multiple state, regional and local elements of the transportation system as a single integrated network.

Objectives	Measurement of Objectives
• Preserve the condition of the existing transportation system	• Percentage of estimated transit capital and local road pavement maintenance shortfalls funded in the RTP
• Improve travel time in congested corridors by relieving bottlenecks and/or providing travel alternatives	• Increase in person-carrying capacity provided by RTP improvements in the most congested corridors and the effect of these improvements on travel time
• Improve the reliability of the transportation system so that users can expect relatively consistent travel times from day-to-day for the same trip on the same mode	• Funding amounts in RTP for signal timing and coordination programs, freeway incident management, and transit productivity programs addressing on-time performance
• Increase coordination and convenience of transit services throughout the region	• Status of service and fare coordination agreements between transit operators • Progress in testing and evaluating TransLink® universal fare card
• Provide travelers with good information when making trip decisions	• Progress in data collection efforts for TravInfo® • Progress in conversion to 511 number • Monitor usage of transitinfo.org Web site • Progress in implementation of TakeTransit℠ trip planning program

The recent strength of the regional economy has both increased daily travel and spotlighted weaknesses in the transportation system. Signs of how much work must be done to achieve the mobility goal include overcrowded or unreliable transit service, the growing congestion on major freeways, the lack of transportation alternatives in some congested corridors, carpool lanes that are discontinuous, and the difficulty in getting to and from the region's freeways on local streets. Even localized congestion within cities has increased as new development outpaces transportation capacity.

Areas for MTC Investigation/Experimentation

Reversible Lanes

- Create new lane capacity more quickly by using reversible lanes in peak direction

HOV Lanes

- Convert some congested high-occupancy-vehicle (HOV) lanes from 2+ occupancy to a 3+ occupancy requirement
- Increase enforcement to preserve travel-time savings for legitimate carpoolers
- Determine where HOV lane-to-HOV lane connections can work

HOV Buy In

- Allow single-occupant vehicles to pay a toll for use of new or existing carpool lanes
- Use revenues to fund transit or intercity rail

Congestion Pricing

- Charge higher tolls on bridges during peak hours to shift traffic to off-peak hours and develop more transit options

Express Buses on Freeway Shoulders

- Allow express buses to use freeway shoulders to bypass traffic where there is no HOV lane or the HOV lane is overcrowded

Supporting Actions Needed From Others

Employers

- Develop comprehensive commute alternative programs for their employees (parking cash out, carpooling, vanpooling, transit subsidies, flexible work schedules, selection of sites near transit, guaranteed ride home programs for people who rideshare, etc.)

Caltrans

- Increase funding and staff support for operational programs such as the Traffic Management Center (TMC), TravInfo® and freeway management (incident detection, ramp metering, etc.)

California Highway Patrol

- Increase HOV lane enforcement

Cities

- Authorize freeway ramp metering in congested corridors (e.g., Interstate 80 and Interstate 880 in Alameda County)

Legislature

- Support for congestion pricing on toll bridges

Transit Agencies

- Consider charging for parking at rail stations
- Experiment with shuttles and demand responsive service

Federal Railroad Administration

- Allow greater flexibility in providing "positive separation" between freight and passenger rail vehicles

Illustrative Projects and Programs in the Plan

Providing Travel Information and Assistance

- **Freeway Service Patrol**
  Roving tow trucks to assist motorists and help clear accidents on freeways to get the traffic moving more quickly
- **TravInfo®**
  A single phone number for traffic conditions, transit schedules and other traveler information from any area code in the Bay Area
- **TransLink®**
  A smart card that makes it more convenient to transfer between transit systems using the same stored value fare card
- **transitinfo.org**
  A Web site offering comprehensive transit trip planning services as well as information on routes, schedules and fares for numerous transit providers
- **RIDES for Bay Area Commuters**
  MTC manages the regional ridesharing service, available to all commuters, to match people with partners for carpools and vanpools

(continued on following page)

Certainly all of these challenges deserve attention and require unprecedented cooperation among a wide range of partners who share the responsibility of planning, designing, delivering and operating an effective and efficient transportation system.

What the Public Said

- Participants in the RTP outreach efforts felt that transportation conditions are getting worse, and they expressed a sense of urgency to address the situation.
- Participants clearly appreciate the need to invest in maintaining the roads and transit systems that have already been constructed and are currently operating, and to improve the performance of the existing transportation system and services (e.g., improving signal timing, better connecting transit services, filling empty buses, connecting carpool lanes on different freeways, filling underutilized carpool lanes, etc.).
- Congestion on freeways and roads was routinely cited as the major manifestation of the transportation problem.
- Participants believe that expanding transit will help relieve this congestion, but are concerned about the adequacy of the transit system, either because transit takes too long, doesn't run when they need it or doesn't take them where they need to go.
- Transportation planners should experiment with trial programs and pilot projects to test new and unique approaches to improve mobility. Participants expressed unfamiliarity with the various agencies involved in transportation, as well as confusion and even anger over complicated decision-making processes, and requested more leadership from MTC.

Policy Discussion

"Fix It First" Is Still Relevant. This RTP commits nearly 80 percent of its resources to maintaining the region's existing transportation infrastructure. Highways and roads need constant repaving; buses, rail cars and tracks all wear out over time and must be replaced; signal timing plans need to be adjusted over time; and cracks in sidewalks and bike paths need repairs. All of these repairs require ongoing funding, which must be set aside in the region's overall transportation budget.

Getting the Right Mix of Projects and Strategies. The public's frustration with high levels of congestion has created greater interest in finding near-term solutions that don't cost an arm and a leg. The RTP's mobility strategy strikes a balance of large projects that can meet future demand, and smaller, faster, less expensive fixes to current problems. This RTP supports managing the existing transportation system better and making it more efficient for its users.

System Management. Since the early 1990s MTC has stressed the importance of the systems approach to operating transportation facilities and services. Programs that support this system operations concept continue to grow and evolve. These include Caltrans' freeway operations programs, the expansion of the roving tow truck fleet on the freeways to help clear incidents, signal equipment updating and coordination of signals among jurisdictions, a universal transit-fare ticket, traveler information programs, and transit scheduling improvements that make use of global positioning satellite information. We expect continuing advances in technology to make a large contribution to the operations area. These include a variety of projects that use electronics, communications or information processing, commonly referred to as intelligent transportation system (ITS) projects. Recognizing that ITS projects work best when they are well coordinated, MTC has begun to work on a regional ITS architecture with our transportation partner agencies to ensure appropriate integration among separate ITS projects. This architecture will guide future project development, using the regional, state and national ITS frameworks, so that new transportation services and facilities can be better coordinated to enhance transportation system operations.

New Ideas. In early 2000, MTC unveiled a collection of transportation improvements, called the Bay Area Transportation Blueprint for the 21st Century, aimed at providing near-term relief in the region's most congested corridors. Many of these projects are proposed for funding in this RTP. Of particular interest to MTC is the creation of a comprehensive system of express buses operating on the region's carpool lanes and on major arterials.

This RTP is committed to further innovation and experimentation in order to move people and goods efficiently and reliably. Possible areas of investigation and experimentation are detailed more specifically on page 25.

Illustrative Projects and Programs in the Plan

(continued from previous page)

Managing Local Arterials

- **Smart Corridors**
  Corridor-level coordination of traffic management systems
- **Signal Retiming**
  MTC program to help local governments improve signal coordination within and between neighboring jurisdictions

Near-Term Congestion Relief

- **Regional Express Bus System**
  Comprehensive system of express buses operating on region's carpool lanes and on major arterials. Examples of new express bus routes soon to be in service include:

  AC Transit
  Reduced headways on Transbay service

  Golden Gate Transit
  Expanded hours of service from Sonoma and Marin counties to San Francisco

  SamTrans
  Rapid bus service on El Camino Real

  Santa Clara VTA
  New and expanded service linking Silicon Valley to Fremont BART

MTC archives

Improve the safety of the transportation system for its users

Safety is essential to the transportation user and a key priority for the state and local agencies that plan, build and operate transportation facilities and services. Regional safety issues were most vividly highlighted when the 1989 Loma Prieta earthquake toppled one of our major freeways and shut down the Bay Bridge for a month. Even on a routine basis, however, there are safety concerns associated with all types of transportation, including transit, street and highway driving, walking, or biking around the region.

What the Public Said

- Participants in our workshops and public opinion poll noted significant safety concerns associated with growing traffic, people's ability to walk and use bikes for basic transportation, and security on transit.

Objectives	Measurement of Objectives
• Ensure key transportation facilities are capable of withstanding a major earthquake	Progress in completing retrofits of: • State-owned toll bridges • Local bridges • BART system
• Ensure MTC, Caltrans and the Bay Area transit operators can effectively coordinate their services following a major earthquake or other significant emergency that disrupts Bay Area transportation	• Conduct annual earthquake emergency exercises with Caltrans and transit operators • Debriefing reports indicating future areas of improvement
• Help ensure the safety of motorists using Bay Area freeways	• Maintain and expand Freeway Service Patrols • Keep call boxes in working order and ensure quick call response time
• Help ensure the safety and security of transit system users	• Proportion of transit operators' budgets that directly contribute to the safety and security of their passengers
• Assist local jurisdictions in their efforts to implement effective strategies to reduce serious injuries and loss of life for pedestrians and bicyclists	• Decrease in the number of pedestrians and bicyclists in injury and fatality collisions in the Bay Area.

- In response to the long and continuing deliberations on the design and cost of retrofitting Bay Area toll bridges for earthquakes, the public noted that it's long past time to get on with the job.

This RTP aims to improve safety on the region's network of roads, bridges, transit facilities and bicycle and pedestrian pathways. In particular, the RTP supports continued planning efforts to help identify preventive measures to address safety concerns.

Policy Discussion

Earthquake Preparedness. Because transportation facilities are vulnerable to the large earthquakes typical of our region, the Bay Area needs to invest in reinforcing highways, bridges, airports and fixed guideway transit systems. The failure of any of these systems after an earthquake could lead to substantial injuries and loss of life, as well as huge economic dislocation during the post-earthquake recovery phase. This RTP recognizes the unfinished business of retrofitting the region's toll bridges and the BART system. In

Areas for MTC Investigation/Experimentation	Supporting Actions Needed From Others
Safety Statistics • Develop an integrated report system that consolidates safety information from a variety of modes to provide a comprehensive picture for the Bay Area	**California Highway Patrol** • Increase freeway enforcement in general and specifically for trucks, and for drivers who create unsafe conditions around trucks
Freeway Safety • Develop protocol for rapid clearing of big rig accidents that block freeway lanes • Explore the possibility of special incident management teams to deal with big rig accidents	**Cities** • Provide more education on bike and pedestrian safety
Pedestrians • Investigate ways to increase funding available for pedestrian safety projects (e.g., dedicating a share of federal highway safety funds for this purpose) • Develop a map of pedestrian collision data for every city in the region • Support local education and enforcement campaigns.	
Bicycles • Conduct regional bike count to provide context for accident data • Establish a hotline for bike safety problems • Conduct education about bike use and safety	

Illustrative Projects and Programs in the Plan

Bay Bridge Replacement

- In 2002, construction begins on a replacement span for the earthquake-vulnerable Oakland-to-Yerba Buena Island segment of the San Francisco-Oakland Bay Bridge. The new east span is scheduled to open to traffic in 2006 or 2007.

MTC Trans Response Plan

- Includes exercises designed to enhance transportation agencies' emergency management readiness. The exercise scenario assumes a 7.5 magnitude earthquake on the Hayward Fault that causes major damage to bridges, freeways, and port, rail and airport facilities.

Freeway Safety

- Clear Lanes Efficiently and Rapidly (CLEAR) Interstate 80 corridor demonstration project. The goal of the CHP's CLEAR program is to quickly reopen lanes to traffic following incidents during peak commute periods by providing additional motorcycle officers dedicated to incident response and clearance. The I-80 demonstration project coordinates CHP's CLEAR program with Caltrans' Traffic Operations System equipment and MTC's Freeway Service Patrol to deliver benefits to travelers.

Bicycle/Pedestrian Safety

- The Regional Bicycle Master Plan—a component of the RTP—combines local and countywide plans into a regional network that is integrated with the multimodal transportation system.
- Traffic Engineering Technical Assistance Program (TETAP) funds are available for bicycle/pedestrian safety.

addition, there are still a number of locally owned (city and county) bridges that require retrofitting for earthquake protection. These needs have been placed in the Blueprint portion of the RTP, and should have top priority for new funding.

A related activity involving earthquake preparedness is the need for coordination of transit service immediately following the event and continuing into the recovery of the transportation system. The region has adopted a plan for emergency communications and coordination of regional transit services. MTC and the region's transportation providers annually conduct a training exercise to test this cooperative process.

With previous earthquakes, there has always been a question about how to manage the funding of emergency services. The Blueprint portion of this RTP proposes creating an earthquake "savings account" for immediate response needs, including emergency capital and operating funds, and temporary loan programs.

Motorist Safety on the Freeways. Since the predominant mode of transportation today is the car, motorist safety has commanded significant attention nationally and at the local level. Advances in vehicle designs and occupant protection systems have lowered the incidence of crashes and reduced exposure of persons in cars to injury. Driver education and enforcement of measures to reduce alcohol-impaired driving, advances in emergency medical response times and emergency services, and development of regional trauma centers are among the reasons for the downward trend.

This RTP supports continued partnership between MTC, the CHP and Caltrans in several freeway safety initiatives, including Freeway Service Patrol tow trucks to assist motorists whose cars breakdown or are involved in accidents, and the maintenance of call boxes that motorists can use for immediate assistance. Both programs are designed to protect motorists from further exposure to risk and injury.

Transit Safety. The funding provided in the RTP for transit system rehabilitation and maintenance helps ensure that the region's transit vehicles and facilities are in good shape and do not contribute to problems of service reliability or safety. Also, allocation of funds for transit operations supports the ability of transit operators to provide police and security systems on transit vehicles.

Bicycle and Pedestrian Safety. Typical causes of bicycle and pedestrian accidents include drivers failing to yield to pedestrians at intersections and marked crosswalks, bicyclists and pedestrians failing to obey traffic signals, and pedestrians attempting to jaywalk across moving traffic streams. The safety of children walking or biking to school is of particular concern.

While addressing bicycle and pedestrian safety issues is primarily a local responsibility, MTC has convened a new Pedestrian Safety Task Force to develop proposals for larger regional involvement, such as the acquisition of better data on the causes of accidents, a resource guide, technical assistance, and education. Safety is one of the key elements of the new Regional Bicycle Master Plan as well. Through the Regional Bike Plan, this RTP supports the development of a continuous bicycle path network allowing cyclists to travel unimpeded through the region, integrating the region's bicycle and transit networks, providing secure bike parking at transit stations, and encouraging local jurisdictions to promote bicycle safety and security in their communities.

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Achieve fairness in the planning, funding and operation of the region's transportation system

The equitable distribution of transportation resources and benefits is a key goal of the RTP planning process. MTC has identified three central equity objectives for this plan:

- Ensure an equitable planning and decision-making process (i.e., all individuals and agencies should have equal access to information and the ability to participate).
- Establish an investment strategy that is equitable in terms of the criteria and distribution of funds under the Commission's control.
- Provide an equitable distribution of transportation benefits to all segments of the Bay Area population — including elderly and disabled residents, members of minority groups, and persons with low incomes — and ensure equal access to the transportation system.

Objectives	Measurement of Objectives
• Provide an equitable transportation planning and decision process; ensure that public comments are acknowledged and responded to	• Periodic review of MTC public involvement procedures to ensure they are effective in engaging the public, including the way public comments are responded to • Continued support for MTC's advisory committees to receive input on special transportation topics: Elderly and Disabled Advisory Committee, Minority Citizens Advisory Committee, Freight Advisory Council, and the MTC Advisory Council • Assistance to partner transportation agencies in enhancing their public involvement efforts
• Ensure that MTC's funding decisions are fair and equity is maintained between transportation agencies, modes, and segments of the Bay Area population	• Funding policies established in the long-range plan reflect public review and comment • Fund programming decisions, which carry out the broad funding policies in the RTP, reflect public and Partnership review
• Provide an equitable level of transportation service for elderly, disabled, minority, and low-income persons	• A social equity analysis is performed for the RTP • Definition of a regional Lifeline Transportation Network, including implementation steps and funding strategy • Completion of Older Americans Transportation Study • Establishment of a Lifeline Transportation Program to direct resources toward community-based planning and implementation strategies to make transportation more available, accessible and affordable for the region's low income population.

The Bay Area is geographically large and diverse. An effective process for engaging the public in transportation planning must take into account a number of issues: the long-range nature of many transportation plans, the regional as well as local focus of the RTP, the difficulty the public has in understanding who is in charge, and the lack of time in people's daily lives to participate. New and creative ways must be found to interact with the public. MTC recently undertook a comprehensive review of its public involvement process, and now has significant initiatives under way to improve it. (See separate report on RTP public involvement, referenced in Attachment C.)

This RTP seeks to ensure that equity is provided in the allocation of resources. For the funds under MTC's control, prime considerations include equity to the region's counties, equity to transportation agencies, equity among various travel modes, and equity among different user groups. Maintaining consensus on the distribution of these funds is increasingly difficult, given the intensifying demands and competition for available regional, state and federal funds. MTC's legislative advocacy program also helps to manage this competition through strong and continuous efforts to develop new transportation revenues, and to maintain the flexibility in current federal transportation programs to spend money on a diverse set of transportation projects.

Description of RTP Equity Analysis

- Use of MTC's travel demand forecasting model to evaluate changes in mobility and access for minority and low-income communities
- Use of Geographic Information Systems (GIS) mapping of grocery stores, child-care centers, educational facilities, hospitals and healthcare facilities, and one-stop government service centers in relation to transit routes to identify gaps in service that can be filled by the Lifeline Transportation Network
- Analysis of the funding allocations in the RTP with respect to regional, county and local investment choices, as well as by travel mode and transit operator

Areas for MTC Investigation/Experimentation	Supporting Actions Needed from Others
Transportation Affordability Study • As recommended in the RTP Equity Analysis, MTC will conduct a transportation affordability study related to low-income persons and the hardships that the cost of transportation may create. • As part of the Transportation Affordability Study and in partnership with local agencies, MTC will undertake a pilot program to evaluate the impact of subsidized transit passes on low-income student school attendance.	**Congestion Management Agencies** • Provide technical assistance and local match funding for welfare-to-work and other equity programs **Federal Transit Administration/Transit Operators** • Develop transit rider profiles in terms of race and income for use in future RTP equity analyses and transit service planning **Federal Health and Human Services** • Merge HHS funding with regional transit operator funds to get more bang for the buck out of paratransit service **County/State Health and Human Services** • Partner with MTC and transit operators to develop a workable approach to improving transit affordability
Lifeline Transportation Network • Define the transit network for transit-dependent residents and identify costs and funding sources. Implement through community-based planning and transit operator plans and programs. Pursue new funding.	
Welfare to Work • Pursue new funding to maintain temporary services started under MTC's Low-Income Flexible Transportation program and the federal job access and reverse commute program	

Illustrative Projects and Programs in the Plan

New Public Involvement Procedures

- In March 2001, MTC adopted enhanced procedures for involving more Bay Area residents, particularly residents of low-income and minority communities, in the Commission's major planning and investment decisions.

RTP Outreach Process

- As part of the new public involvement procedures, the RTP outreach process entailed a telephone survey of registered voters, public workshops held throughout the Bay Area, and an interactive Internet survey. In total, over 4,000 Bay Area residents participated in the 2001 RTP outreach effort.

RTP Equity Analysis

- MTC undertook this analysis as part of the RTP, to ensure the full and fair participation of low-income and minority communities in the RTP preparation process, and to ensure that transportation benefits are delivered to these communities in a timely manner and in such a way that negative impacts are avoided.

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Many of the ongoing programs supported by this RTP deal squarely with equity in access to transportation services by low-income persons, elderly persons and persons with disabilities. These include efforts to develop transportation solutions for those transitioning from welfare to work, Transportation for Livable Communities funding that helps revitalize some of the region's most disadvantaged communities, the Low-Income Flexible Transportation program, and efforts to improve the availability and affordability of transportation options. By fully covering transit shortfalls, this RTP maintains the region's commitment to ensure that all public transit services are accessible to persons with disabilities in compliance with the Americans With Disabilities Act (ADA).

What the Public Said

- RTP outreach participants who depend on transit the most are very concerned that transit service is inadequate. Highlighted issues related to difficulty in making connections, transit taking too long, and not enough service to where people needed to go.
- Participants supported the development of a "lifeline" transit system — one that is capable of helping people in low-income communities get to and from key destinations — but there were a variety of opinions on how such a service should be funded, including getting more productivity out of the existing system as well as seeking new revenue.
- While the preponderance of people participating in the workshops — and those responding to our public opinion poll — did not feel transit was too expensive, this was not true of those with low incomes, who said current transit fares are too high.
- The public commented on various new transportation funding sources — sales taxes, gas taxes, bridge tolls, vehicle registration fees and the like — but typically did not express opinions about whether these fund sources were equitable for different segments of the Bay Area population.

Policy Discussion

Public Involvement — A Continuing Priority. This RTP is the first big test of new procedures aimed at improving citizen input to the plan. To kick off the RTP process, nearly 70 RTP-related workshops were held around the region to elicit input from business, environmental, labor and community-based organizations. An additional eight subregional meetings were conducted in the fall of 2001, after the draft RTP was released. As a complement to the regional MTC meetings, each county congestion management agency conducted its own public involvement process before submitting project recommendations to MTC.

Several of the outreach workshops were held in minority and low-income communities, and were conducted for the purpose of discussing social equity and environmental justice issues. MTC cosponsored these workshops with community-based organizations throughout the region and provided direct financial assistance to help with meeting preparations and recruitment of people to attend. This was the first time MTC partnered with community-based organizations in the development of the RTP. Over 700 people attended the community-based workshops and provided feedback on RTP goals, policies and projects. When needed, interpreters provided translation. Input from these workshops was summarized and presented to the Commission in May.

Environmental Justice and the RTP. The new federal environmental justice policy seeks to ensure that the benefits and burdens of transportation decisions and programs on minority and low-income communities are explicitly addressed in the regional transportation planning process. This RTP continues and expands efforts to address the transportation needs of minority and low-income communities. For example, the plan commits to fully funding the estimated transit capital rehabilitation and replacement shortfall, with much of this money going to transit operators in the urban core where the vast majority of transit-dependent riders live.

In addition, the equity analysis for this RTP includes an evaluation of travel benefits to low-income and minority communities, a definition of service improvements, and an analysis of how the RTP allocates funds. The analysis also identifies areas of future work to improve MTC's ability to evaluate the RTP from an equity perspective. The equity analysis is described in greater detail in Attachment C.

Implementing a Lifeline Transportation Network. Many of the equity themes relate to the inability of people in low-income and minority communities to travel to specific activities that are essential for daily life. This requires moving beyond the plan level, modeling-based analysis of the RTP to address real issues of need at the scale of neighborhood streets and local bus lines. As part of the overall equity review, this RTP defines a Lifeline Transportation Network, including transit routes, gaps affecting low-income communities and estimated costs to fill these gaps. This system addresses both spatial and temporal service gaps. Spatial gaps represent areas where there is no service but transit access is needed. Temporal service gaps represent times where needed service isn't offered or isn't continuous, or where service is not synchronized between two transit operators or two modes of transportation. The Lifeline Transportation Network is described in greater detail in Attachment C.

While a regional initiative can lead to the definition of a Lifeline Network, the region's low-income communities, transit operators and county social services programs will be key implementing agents of whatever is proposed. The Lifeline Transportation Network is considered on an equal footing with the Regional Transit Expansion Program serving peak-period commute travel. Both are viewed as complementary regional priorities within the RTP, and both serve to advocate the need for additional transportation revenues.

Illustrative Projects and Programs in the Plan

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Welfare-to-Work

- **Regional and County Welfare-to-Work Plans**
  Plans were prepared in eight Bay Area counties to develop and implement innovative transportation strategies to help CalWORKs* participants and low-income individuals travel to work, childcare, school and other vital destinations. The ninth county plan is underway.
- **Low-Income Flexible Transportation (LIFT) Program**
  This program was started with $5 million in federal funds to accelerate implementation of local welfare-to-work projects identified in county plans. The program requires matching funds by local project partners. MTC has established an annual fund for LIFT, including State Transit Assistance and Federal Jobs Access/Reverse Commute funds to begin implementation of services identified by the Lifeline Transportation Network analysis and subsequent local validation of this analysis.

Transportation for Livable Communities Program

- Provides planning and capital grants to support small-scale transportation investments that can make a big difference in a community's vitality, such as streetscape improvements and transit-, pedestrian- and bicycle-oriented developments.

* California Work Opportunity and Responsibility to Kids welfare program.

Plan and develop transportation facilities and services in a way that protects and enhances the environment

The Bay Area's prized environmental quality must not be sacrificed as we address the challenges presented by continued growth and increasing transportation demands. Historically, the major areas of environmental concern include air emissions, noise from transportation sources, impacts on the Bay and wetlands due to construction of facilities across or adjacent to the Bay, visual impacts of projects, community disruption and seismic safety.

Objectives	Measurement of Objectives
• Evaluate the regional environmental effects of the RTP	• Adoption of a program-level environmental impact report under the California Environmental Quality Act (CEQA) that analyzes the potential regional impacts of transportation investments in the RTP
• Ensure that project-level impacts are addressed and mitigated prior to MTC approval of state and federal funding	• Continue to require that project sponsors have approved environmental reports before seeking federal and state funding from MTC
• Ensure that MTC's plans and programs conform to the federal ozone attainment plan and support reductions in mobile source emissions required in the state Clean Air Plan	• Air quality conformity determinations made for the RTP and the Transportation Improvement Program (TIP) that show that the region will achieve the transportation emissions budget in the ozone attainment plan • Assist transit operators with bus replacement/repowering programs to lower nitrogen oxides and particulate emissions • Implement new Transportation Control Measures and complete investigation of further study measures in 2001 federal ozone plan
• Support programs directed at improving the flow of traffic on local streets and freeways to minimize vehicle emissions and excess fuel consumption	• Funding support in the RTP and TIP for signal coordination/timing programs, freeway traffic management and Freeway Service Patrols
• Provide alternatives to traveling in single-occupant vehicles and incentives to carpool or take transit	• Miles of HOV lanes in RTP and TIP. Support for pre-tax transit benefits and various fare instruments that provide transit discounts • Maintenance of regional ridesharing program (RIDES for Bay Area Commuters) • Adoption of Regional Transit Expansion Program and related funding agreements

The RTP devotes significant resources to maintaining the current transportation system and investing in system management and customer service strategies that are generally benign in terms of their environmental effects. However, the daily use of the transportation system by people commuting to work or making other trips will consume energy and generate emissions from motor vehicles that affect regional air quality. While state and federal agencies are directly responsible for the fuel economy of cars and the amount of tailpipe emissions, this RTP supports cleaner air through the development of alternatives to the private automobile.

Areas for MTC Investigation/Experimentation

Parking Incentive Program

- Carry out a study of ways to encourage the conversion of free parking to paid parking in different environments. Also consider incentives for reducing off-street parking required by local jurisdictions for new development, and to increase the transit orientation of new developments.

Particulate Trap Retrofit Program

- Team with transit operators to examine the potential to accelerate the application of particulate traps on diesel-powered buses to achieve earlier compliance with state regulations

Study Effects of High-Speed Freeway Travel

- Estimate emissions associated with travel over 55 mph and over 60 mph, and compare these to the total motor vehicle emmissions inventory. Evaluate feasibility of episodic speed limit enforcement on high-ozone days.

Enhanced Housing Incentive/ Station Access Program

- Seek additional funding to provide incentives for new housing near transit and improved access to transit stations

Update High-Occupancy-Vehicle (HOV) Lane Master Plan

Supporting Actions Needed From Others

State Legislature

- Allow Bay Area to tailor an improved vehicle Smog Check program to its needs, particularly the identification of gross polluters and subsequent emission fixes

Bay Area Air Quality Management District

- Increase funding for vehicle buy-back program, focusing on gross polluters

Environmental Protection Agency

- Tighten emission controls on aircraft and marine vessels, which are under federal control

Congress

- Adopt stricter fuel economy standards for all cars and light/medium-duty trucks
- Increase tax-free transit benefits to same level as parking benefits

California Air Resources Board

- Provide more flexibility in implementing NOx and particulate trap retrofit schedules for urban buses
- Enforce parking cash-out requirement

Employers

- More commute alternative program efforts, especially parking cash-out

Caltrans

- Develop new sound wall technologies and pavement treatments that provide better noise mitigation in the vicinity of freeways

New Transportation Control Measures in 2001 Ozone Attainment Plan

- Regional Express Bus Program
- Transit Access to Airports
- TLC Program and HIP
- Expansion of Freeway Service Patrol
- Bicycle and Pedestrian Programs

What the Public Said

- The RTP telephone survey showed that the environment goal ranked lower in priority than other RTP goals, and the relationship of the transportation system to the environment was not spontaneously raised in many RTP outreach workshops.
- Where environmental issues did get raised, the most common threads were the importance of transit; the need to locate new housing and offices near transit; more bike and pedestrian facilities; accelerating the use of low-emission vehicles; and awareness of the need for more fuel-efficient vehicles and conservation of energy through changes in driving behavior.

Policy Discussion

Growth and Transportation. It is clear from the financial constraints in the RTP that the development of new transportation system capacity will lag considerably behind the growth in population and jobs. While there may be a few areas where transportation investments could alter land-use development patterns, much of what is occurring in the land development business has been set in motion by demographic, economic and fiscal forces more powerful than the region's limited highway and transit expansion efforts.

Specific projects can generate their own set of environmental issues, some quite controversial. Sponsors of individual transportation projects must, before receiving federal or state funding from MTC, prepare their own project-level environmental reports, and identify appropriate mitigation. These documents also must address local air quality issues prior to certification by federal transportation agencies.

What Are the Real Air Quality Trends? Probably the most visible connection in the public's eye between air quality and transportation is the potential role of greater public transit use. The RTP's major commitment to transit is the ongoing replacement of vehicles and the continuance of operating subsidies to ensure that the existing system will continue providing service in the future — two-thirds of all RTP funds are dedicated to this purpose.

Despite the technology-driven trend toward lower vehicle emissions, the federal air quality plan continues to include a set of motor vehicle control strategies, called transportation control measures (TCMs), which are intended to further reduce auto emissions. While there is considerable evidence that these types of strategies (see Attachment B) only provide small emission reductions, the RTP supports them because they also provide mobility benefits.

Among the new transportation control measures included in the *2001 Bay Area Ozone Attainment Plan* are MTC's development and expansion of a regional express bus program; initiatives to promote walking and bicycling as viable forms of transportation; the Transportation for Livable Communities (TLC) and Housing Incentive Program (HIP) initiatives, which provide incentives for transit- and pedestrian-oriented development; expansion of the Freeway Service Patrol; and improved transit access to the Bay Area's three major commercial airports.

The Need for More Efficiency From Cars. In addition to air quality issues associated with public health effects, the region must take steps to ensure a long-term energy supply, and reduce greenhouse gases that accelerate global warming. The most direct course to a solution involves requiring changes to the fuels and efficiency of automobile engines, which are regulated by federal and state environmental protection agencies.

This RTP supports other initiatives such as signal timing coordination and freeway traffic and incident management, which deliver energy use benefits by making traffic flow more efficiently. Reducing stop-and-go vehicle travel saves significant amounts of energy by allowing cars to move at the most efficient operating speeds.

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Support transportation investments that are essential to the economic well-being of the Bay Area

The productivity and efficiency of the transportation system is a major factor in maintaining the economic vitality of the Bay Area. Despite the downturn of recent months, the regional economy has experienced a dramatic resurgence since the recession of the early 1990s, and the annual gross regional product for the Bay Area is now estimated at more than $240 billion — which would rank 24th among the world's economies if our region were a nation-state.

The region has multiple job centers, each with its own specialization within the larger economy, requiring an effective transportation system to promote exchanges in people, products and services between these centers. Bay Area companies effectively draw from a regional labor pool, such that employees may live at considerable distance from their work due either to choice or housing conditions. Getting people to and from their homes and jobs will continue to be a major challenge, particularly as different job sectors grow and contract, with a constant rearrangement of commute patterns.

Objectives	Measurement of Objectives
• Ensure the Bay Area's major job centers maintain access to the region's labor pool	• Delivery of transportation projects that increase the accessibility of major job centers to the rest of the region
• Increase the reliability of the transportation system for the movement of freight	• Freeway management strategies for major truck routes: incident detection, Freeway Service Patrol, ramp metering, etc.
• Encourage increased commitments from employers to offer measures that will improve the convenience of the commute for their employees	• Number of employers and employees assisted by RIDES for Bay Area Commuters
• Develop increased public transit options for air passengers using the region's major commercial airports	• Funding in RTP for transit projects that improve access to airports
• Plan for increase in air passengers, air cargo and waterborne cargo	• Periodic updates and revisions to Regional Airport System Plan and San Francisco Bay Area Seaport Plan (see Attachment D)

To stay competitive in the emerging global economy, the Bay Area must maintain the ability to quickly move people and cargo to other parts of the world by air and sea. The region's surface transportation links must be kept in balance with the air and sea terminal capacities for the entire system to work effectively.

What the Public Said

- The business community indicated that the high cost of housing forces employees to endure longer and longer commutes. This makes it difficult to attract and retain employees, and also affects workers' productivity.
- The public recognizes the need for the movement of goods, but is somewhat negative about mixing trucks with auto traffic. People would like to see more freight diverted to rail or ferries.
- In contrast, trucking firms believe it would be helpful to get more people into transit and carpools to free up capacity for trucks; they say highways are often the best option for moving freight.
- The localized impacts of goods movement (parking and on-street truck deliveries) also tend to draw negative responses.
- Safety is a concern due to the number of truck accidents (which may be caused by trucks or by cars getting in the way of less maneuverable big rigs).

Areas for MTC Investigation/Experimentation

Truck Routes

- Ensure that key truck routes have the benefits of a full suite of freeway traffic management strategies such as the Freeway Service Patrol, call boxes, incident detection and traveler information services, starting with Interstate 80 and Interstate 880
- Explore other innovative options for freight movement in congested corridors

Airport Access

- Explore with airports and airlines the concept of remote ticketing and check-in at off-airport terminals, connected to airports by public and private transit; and seek more visible/convenient pickup locations at airport terminals

Supporting Actions Needed From Others

Cities

- Cooperate in identifying truck parking facilities in the Interstate 880 corridor for overnight use by trucks serving the Port of Oakland

Private industry

- Ship and receive more freight at night

Employers

- Develop comprehensive commute alternative programs as discussed under the "Mobility" goal to attract and retain employees, and ease the inconvenience of their commutes

Illustrative Projects and Programs in the Plan

Assistance to Employers

- **RIDES for Bay Area Commuters** Provides ride-matching services to the public and employers.
- **Employer-sponsored commute alternative programs,** such as those at Cisco Systems and the city of Palo Alto, which provide transit subsidies to employees, bike programs and/or bicycle support facilities, telecommuting programs, full-time Employee Transportation Coordinators, and other services.

Airport and Seaport Access Projects

- **Joint Intermodal Transfer Facility** A railyard project that would expand the Port of Oakland's capacity for freight container transfers between rail and ships. Recent seaport plan amendments will increase the JIT's operational efficiency.
- **Planned airport transit connections** BART to San Francisco International Airport (coming in 2003), BART connector to Oakland International Airport (Track 1 funding), San Jose International Airport people mover connection to light rail (Committed funding).
- **California High Speed Rail System** Plans are being developed for a system to span the state from north to south (Blueprint).

Projects That Would Improve Freight Mobility

- **I-580 truck climbing lane** over Altamont Pass (in the Blueprint)
- **I-238 widening** and truck bypass (in the Blueprint)
- **I-880 Corridor Truck Access Study** The key study recommendations are to develop new and expanded truck parking facilities and to improve truck route maps and signage.

Policy Discussion

The Role of the Employer in Getting People to Work. As commutes become more taxing, employers are more concerned about improving the convenience of the commute for their workforce, both in order to protect the productivity of their workers and to retain them in a highly competitive job market. This RTP continues to support employers' efforts to offer alternatives to difficult commutes, including:

- a full-time or part-time transportation coordinator;
- ridematching services with preferential parking provided on site;
- flexible work schedules to enable employees to miss the peak of the commute;
- having transit tickets distributed on site or providing employees with pre-tax transit benefits through MTC's Commuter Check™ program;
- running shuttles from the workplace to transit or organizing subscription buses;
- improving transit stops near their sites.

Improve the Ease of Goods Movement. While many people would like to see more freight shifted to rail or on other non-highway modes such as ferries, shipping freight by truck is more cost-effective than rail shipment for distances of less than 500 miles, and only about 1 percent of the goods moved on Bay Area freeways might be susceptible of diversion to rail. Putting some of the cargo that crosses the Bay on ferries to reduce trucks on bridges would be expensive to trucking firms if they had to pay for the ferry operations. Truck-only road facilities also are unlikely because of real estate costs and land-use constraints in urban areas.

For their part, the trucking companies would like to see fewer vehicles on the key truck routes and more reliable freeway operations, including quicker removal of accidents. Reliability is important to companies that minimize their inventory by relying on just-in-time deliveries. However, avoiding the so-called rush hour is getting increasingly difficult.

This RTP supports several approaches for easing the movement of goods:

- expand the capacity and improve freeway management on major truck routes;
- develop overnight parking and full-service truck stops in key corridors, such as Interstate 880;
- provide special response teams to manage freeway incidents involving big rigs, and to get traffic flowing more quickly after an accident.

Improve Surface Access to Airport and Seaport Terminals to Keep Pace With Growth. Airports and seaports link the Bay Area economy to other parts of the U.S. and international markets, providing distribution points for passengers and freight. While the ultimate decisions about development and expansion of the region's airports and seaports are largely made by the operators of these facilities and their funding partners, such as the FAA for airports, these decisions must be coordinated with the planning of surface transportation connections. Given the volume of traffic on the freeways serving these airports, it is clear that new transit systems will be required, and these improvements are supported in this RTP. In addition, as these airports grow, it may be necessary to borrow some of the airport access concepts that are found in Europe, including:

- remote baggage ticketing and check-in;
- ferry services from areas such as the North Bay to San Francisco International Airport and Oakland International Airport;
- connections to a proposed California high-speed rail system, which would provide a link to the Central Valley or even serve as an alternative mode for passengers traveling to Southern California or Sacramento.

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Support community-based efforts to improve quality of life by providing access to transportation funding

Transportation is one part of the complex equation that makes up our community vitality. This RTP expands support for integrating regional transportation planning with local initiatives aimed at improving quality of life by using the flexibility provided by federal transportation programs to seed community projects. The RTP also builds on regional interest in rethinking growth patterns. Current projections indicate a population growth of over 1 million new people for the Bay Area by 2025. How and where these people will be housed is one of the key questions to be addressed by MTC and the other regional agencies currently involved in the Smart Growth planning effort.

What the Public Said

- Over 90 percent of the participants in the RTP outreach process support strategies to place more mixed-use and compact development near transit and to build more housing in the region's core.
- About 60 percent of the participants strongly or somewhat opposed creating new suburbs and extending transportation to these areas.
- However, a number of people questioned whether the region could provide enough infill housing for the million new residents in the urban core, and whether growth boundaries in centrally located communities would simply exacerbate transportation problems by pushing more development farther out.

Objectives	Measurement of Objectives
• Maintain the condition of community roads and local transit equipment as a down payment on community vitality	• Percentage of local street pavement and transit shortfalls funded in RTP in each county
• Foster new ideas for improving communities through transportation investments	• Number of TLC projects carried through the implementation phase • Completion of Smart Growth project and adoption of new land-use forecast by the Association of Bay Area Governments (ABAG)
• Assist with efforts to plan and implement transit-oriented development projects	• Number of new housing units created near transit associated with HIP effort
• Support plans and programs that make it more convenient and safer to walk and bike	• Implementation of Regional Bicycle Master Plan • Implementation of regional pedestrian safety program

- Some advocates for growth control suggested that MTC withhold highway funding or condition highway funding to limit the amount of suburban sprawl. Others support MTC using its funding allocations as a "carrot" to promote transportation and land-use coordination. Most agreed that neighborhoods, commercial districts and employment centers, regardless of location, should be designed better to make it easier for people to walk or bike to their destinations.

Policy Discussion

Expanding the Transportation for Livable Communities Program. This RTP recognizes that the main decision makers for changes in the land-use arena are the more than 100 locally elected councils and boards that govern the region, and as such continues to support a set of objectives to focus the role of transportation investment on:

- enabling residents to use a range of travel modes, including transit, walking and biking, to access jobs, shopping, recreation and other daily needs;
- providing that streets, transit, pedestrian and bicycle ways are part of a system of integrated routes;
- providing for a diversity of development and other community-oriented transportation strategies designed to limit the need to travel from one community to another to access basic necessities of living; and
- providing for the design of streets and other transportation facilities and amenities that are integrated into the overall community design and are conducive to a sense of community identity and pride.

Areas for MTC Investigation/Experimentation	Supporting Actions Needed From Others
Housing Near Transit • Consider ways to pool a variety of funds from different agencies/sources to create greater incentives and accelerate the development of housing near transit	**Business and Environmental Organizations** • Work at the grass roots community level to support infill housing proposals
Jobs/Housing Balance • For areas where housing near transit is not an option, provide technical assistance for new development combining jobs and housing together	**State** • Consolidate various incentive programs at Caltrans, Housing and Community Development, Treasurer's Office, and other state agencies

Illustrative Projects and Programs in the Plan

Examples of TLC Projects

- **Ohlone-Chynoweth Commons, San Jose.** An affordable, rental housing development with 194 units, community facilities and convenience retail space adjacent to the Ohlone-Chynoweth light-rail station.
- **Acorn/Prescott Neighborhood Transportation Plan Improvements, Oakland.** The plan for this West Oakland neighborhood is designed to improve connections between the neighborhood shopping center, downtown Oakland, the West Oakland BART station transit hub and over 900 units of new or renovated housing.

Examples of HIP Projects

- **Sereno Transit Village, Vallejo.** A 125-unit affordable housing project built adjacent to the proposed transit center and within walking distance of a major shopping center.
- **Dublin Transit Center.** A large, mixed-use development adjacent to the Dublin BART station. A housing development with 1,500 units is proposed for the site.

Regional Bicycle Master Plan

- A component of the RTP, this plan combines local and countywide plans into a regional network of bike paths, bike lanes and bike routes integrated with the larger multimodal transportation system.

These objectives are the foundation for the Transportation for Livable Communities (TLC) program, which started in 1998 and was modified in 2000 to include the appropriately named Housing Incentive Program (HIP) to support denser housing near transit. These programs have engaged a whole new set of community-based organizations in developing plans and projects for their neighborhoods, and to help address transportation equity issues by directing funds to more disadvantaged communities in the region. This RTP commits substantially more flexible federal funds to pursue TLC/HIP objectives and extend the program to communities that have not yet participated.

A New Look at Smart Growth. MTC, the Association of Bay Area Governments, the Bay Area Air Quality Management District and three other regional agencies have launched a Smart Growth initiative intended to revitalize central cities and older suburbs, preserve open space and agricultural land, and enhance public transit. This RTP supports these objectives by committing to maintain existing streets and roads, promoting transit- and pedestrian-oriented development through programs such as TLC/HIP, and enhancing public transit through both the Regional Transit Expansion Program and programs for the maintenance and replacement of existing transit vehicles and facilities.

If the RTP is to be a sound, long-term investing strategy for the region, one of the first questions that must be answered is, how much money will we have to invest? The amount of funding projected to be available determines how much we can invest to maintain, operate and improve the region's transportation system over the 25-year plan period. When we do the math, it becomes clear that, despite the large sums that will be generated from existing funding pots, new revenue sources will be needed to maintain our current services and expand transportation facilities to serve future growth in Bay Area population and employment.

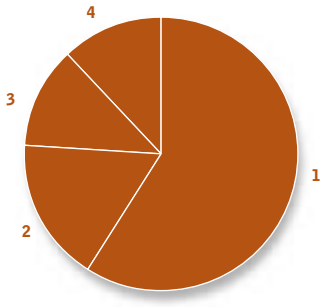
What Are the RTP Financial Assumptions?

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) instituted a requirement that long-range transportation plans be financially constrained. Successor legislation, the Transportation Efficiency Act for the 21st Century (TEA 21), passed in 1998, reaffirmed this federal planning mandate.

This RTP and the past two RTPs have defined financially constrained as meaning those federal, state and local revenues that are currently available, projected out 25 years; no new revenue sources are assumed to be available. Financial assumptions for these revenues are as follows.

- Federal and state transportation formula revenues, primarily per-gallon fuel tax revenues, are assumed to grow at a rate of 2 percent annually, based on Caltrans' long-term travel and fuel forecast.
- The Bay Area is projected to receive its historic share of federal and state discretionary funding, which also grows 2 percent annually.

Projected 25-Year Revenues



		Billions of Dollars	Percent of Total
1	Local	$51.4	59%
2	Regional	14.5	17%
3	State	10.9	12%
4	Federal	10.6	12%
	TOTAL	$87.4	100%

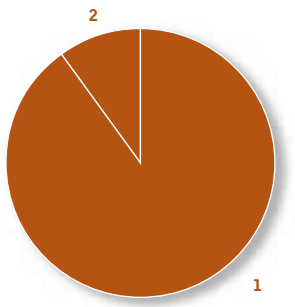
- Local toll revenues are based on projected travel demand on each of the region's toll bridges.
- County transportation sales tax revenues are based on the Center for Continuing Studies on the California Economy's 20-year taxable sales projections.
- County transportation sales tax measures that sunset during the 25-year RTP period (Contra Costa, San Mateo and San Francisco counties) are assumed not to be renewed; no new transportation sales taxes are assumed for those counties where they presently do not exist (Marin, Napa, Solano and Sonoma counties).
- Transit fares are expected to keep pace with inflation and to increase with projected ridership gains.

How Do the 2001 RTP Financial Projections Differ From Previous RTPs?

In the past three RTPs (1994, 1996 and 1998), MTC projected revenues and project costs in year-of-expenditure dollars. This method of "inflating" revenues was used to show how much a project would cost in the future. In a departure from this practice, the 2001 RTP update uses current dollars (i.e., how much a project or program would cost if built today). This approach is consistent with most of our partner agency plans and programs. The 2001 RTP update also differs from past RTPs in that it covers a 25-year period; past plans had a 20-year duration.

Total 2001 RTP projected revenues are $87 billion in 2001 dollars; this compares to a 1998 RTP total projected revenue estimate of $90 billion in inflated dollars. (The $90 billion in inflated dollars is actually worth about $65 billion in 2001 dollars.) Most of the incremental 2001 RTP revenue comes from the additional five years covered by the plan, the inclusion of $6 billion in fresh revenues owing to the passage in November 2000 of Alameda County and Santa Clara County sales tax measures, and passage of AB 1171 (Dutra), which extends the $1 seismic bridge toll through the RTP period.

Committed Funding vs. Track 1



		Billions of Dollars	Percent of Total
1	Committed Funding	$78.8	90%
2	Track 1	8.6	10%
	TOTAL	$87.4	100%

What Are the Major Sources of Transportation Funds?

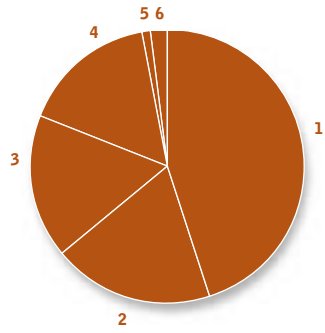
The $87 billion in projected revenues represents the financially constrained budget for the 2001 RTP. As shown in the pie chart to the upper left, "Projected Revenues," the bulk of these funds are from local sources, primarily transit fares, property taxes, dedicated sales tax programs, and state gas tax subventions to local jurisdictions. Making up a smaller piece of the pie are state and federal revenues, mainly derived from gas taxes, and regional revenues, mostly from bridge tolls and BART sales tax revenues.

The 2001 RTP revenue estimate can be broken into two main funding categories: a) "committed" revenues to ongoing projects and programs, and b) uncommitted, discretionary funding available to undertake new projects and programs. This discretionary slice of the funding pie is referred to by MTC as "Track 1".

Committed Revenues

Most of the $87 billion in projected RTP revenue — about 90 percent — is already committed by law, voter mandates or recent MTC programming actions. Most of this "committed funding" — amounting to nearly $79 billion out of the total $87 billion in estimated revenues — will go toward protecting the region's existing transportation infrastructure (see chart on previous page, lower left). The $79 billion is comprised of two main spending categories: a) the cost of ongoing operation, management, maintenance and rehabilitation of the region's transportation infrastructure already in place, and b) projects with existing funding commitments, including MTC's Transportation Improvement Program (TIP) and fully funded sales tax projects. As shown in the pie chart titled "Committed Funds Spending Breakdown" to the right, over 80 percent of the committed revenue is used to maintain and expand Bay Area transit systems; another 16 percent is used to maintain local roads, and about 1 percent is available to expand Bay Area highways.

Committed Funds Spending Breakdown



		Billions of Dollars	Percent of Total
1	Transit Operations	$35.4*	45%
2	Transit Rehabilitation	14.8	19%
3	Transit Expansion	13.4	17%
4	Roadway Maintenance and Operations	12.5	16%
5	Roadway Expansion	1.1	1%
6	Other**	1.6	2%
	TOTAL	$78.8	100%

* 36% fare revenues/64% subsidy

** Other includes bike and pedestrian improvements, TLC/HIP, system management, etc.

Uncommitted (Track 1) Revenues

The funds remaining after accounting for the $79 billion in committed funding consist primarily of federal discretionary and flexible funds, certain state funds allocated through the State Transportation Improvement Program (STIP), and regional toll funds for transit expansion projects. These revenues — amounting to $8.6 billion — are the "Track 1" funds. Prioritizing these funds for worthy projects and programs is the bottom-line task of this RTP.

How Should Future Track 1 Funds Be Divided?

The Track 1 spending recommendations reflected in this RTP fall into three separate categories, correlated with the entities that had primary responsibility for developing the recommendations. (See table on next page.)

- Regional programs: $3.9 billion (MTC)
- County priorities: $3.4 billion (congestion management agencies - CMAs)
- Joint regional/county projects: $1.3 billion (Caltrans/MTC/CMAs)

Total Track 1 Funds: $8.6 Billion

2001 dollars

Regional Programs (MTC) $3.9 Billion	County Priorities (Congestion Management Agencies - CMAs) $3.4 Billion	Joint Regional/County Selection (Caltrans, MTC and CMAs) $1.3 Billion
• System Management and Operations • Streets and Roads Maintenance • Transit Capital Rehabilitation • Transportation for Livable Communities (TLC)/Housing Incentive Program (HIP) • Regional Transit Expansion Program	• Maintenance • Operation • Expansion • TLC/HIP (county share) • Bike/Pedestrian	• Interregional Transportation Improvement Program (ITIP)

Regional Programs

The RTP proposes to assign almost half — $3.9 billion — of the $8.6 billion in Track 1 discretionary funding "off-the-top" to important regional programs and projects. The Regional Transit Expansion Program also leverages county and joint regional/county Track 1 funds totaling about $800 million; including this funding brings the total regional program to almost 60 percent of available Track 1 funding. More than 80 percent of this MTC-directed funding will be used to maintain and expand Bay Area transit systems. The remaining funds will go toward fixing and managing local roads, and to programs that support community vitality and nonmotorized travel.

Contributing to Systems Management and Operations

MTC is actively involved with other Bay Area transportation agencies in seeking ways to operate and manage the existing transportation network more efficiently. Managing traffic, improving transit and roadway operations, quick response to freeway incidents and providing travel information are services that are highly valued by the public, according to MTC surveys and polls. Specific examples of desired customer service programs include: TransLink®, which will establish a universal transit fare card; TravInfo®, the regional telephone service for traffic and transit information; and the roadside motorist-aid call box and tow truck systems. All these programs help to improve travel conditions without requiring large capital expenditures.

Maintaining Streets and Roads

One of the RTP's core commitments is to maintain a defined network of regionally important state highways and local roads known as the Metropolitan Transportation System, or MTS. To fully fund estimated MTS pavement maintenance needs in this

RTP, MTC will add $130 million in Track 1 funding to the $300 million in local funds already committed to this purpose. State highway maintenance is assumed to be fully funded with nearly $4 billion from the State Highway Operations and Protection Program (SHOPP).

The seismic retrofit program for the state-owned toll bridges is assumed to be fully funded with almost $2 billion in seismic surcharge tolls, and state and federal highway funds. The Golden Gate Bridge seismic program also is assumed to be fully funded, with $300 million in bridge tolls, state and federal funds.

Beyond this, MTC estimates a remaining need of about $10 billion for non-MTS pavement maintenance, non-pavement maintenance (lighting, drainage, etc.) and local bridge maintenance; of this total need, about $7 billion in revenues are projected to be available through locally dedicated funds, leaving an estimated $3 billion shortfall. County CMAs have determined how much of this shortfall to fund through their local priority-setting process. (See "County Priorities," on page 54.)

Totaling all these categories, MTC estimates that more than $16 billion will be needed to maintain our existing roads and bridges over the next 25 years, but that less than $14 billion will be available — leaving an unfunded shortfall of more than $2 billion.

Keeping the Existing Transit System Running

Maintaining the existing transit system is another major RTP commitment. This RTP gives priority to funding asset replacement and rehabilitation before funding proposed service expansion. To determine what is needed to keep the existing system in good shape, MTC analyzed replacement and rehabilitation costs as submitted by the region's transit operators. The table on page 53 shows that after nearly $14 billion in committed funding is accounted for, there is still a $1.1 billion capital funding deficit.

In deliberations during the development of this RTP, the Commission decided to reaffirm its prior RTP commitment to fund 100 percent of the region's transit capital shortfall off the top from regional revenues. This action is subject to the following conditions.

- The Commission will set one or more performance and coordination standards that each operator will be required to achieve to remain eligible for 100 percent regional funding.

  The following measures, or alternatives, will be evaluated prior to the programming of funds from the Surface Transportation Program, the Congestion Mitigation and Air Quality Improvement Program, and the State Transportation Improvement Program:

  - Require each transit agency to maintain a local contribution toward its annual combined operating and capital budget from fares and local support revenues at the same percentage as it is contributing in fiscal year 2001-02 in order to maintain a balance between regional and local responsibility for transit funding, especially in cases where the transit agency intends to expand beyond existing service levels.

  - Require compliance with the Commission's Transit Coordination Plan as a condition of regional transit capital fund programming. The plan is updated annually to establish what is expected of each transit agency in terms of implementing specific coordination improvements. This requirement currently applies to the Commission's allocation of State Transit Assistance funds; under this condition, the requirement would extend to programming flexible highway funds for transit capital.

- Following the adoption of the 2001 RTP, the Commission will establish criteria for determining which portions of the existing transit network are "regionally significant" and are, therefore, to be included in the calculation of the region's transit capital shortfall. One option is to establish a regional Metropolitan Transportation System (MTS) for transit routes, similar in concept to the already-established MTS road network. This condition is predicated on being able to identify regional transit routes and determine what portion of a transit operator's total system would be eligible for regional capital funding. As an alternative, the Commission could establish a standard for the type of rehabilitation/replacement that the Commission considers "regionally significant". Finally, the Commission could apply a higher local match requirement for lower priority capital rehabilitation projects or for capital equipment used to support services that are an expansion beyond the existing transit system.

- The Commission's commitment is subject to the availability of funds (programming capacity) to cover the shortfall beginning with the first year of new federal transportation legislation (fiscal year 2003-04).

With these conditions, the Bay Area's transit capital shortfall is fully funded in Track 1.

Transportation for Livable Communities Program and Housing Incentive Program

MTC's Transportation for Livable Communities (TLC) program and Housing Incentive Program (HIP) support community-oriented transportation strategies and encourage local jurisdictions to build high-density housing near regional transit facilities. Both programs have proved to be extremely popular and typically have been oversubscribed beyond funding availability. The 2001 RTP triples the TLC/HIP programs, from $9 million per year to $27 million per year, with $18 million per year available for regional TLC and HIP programs, and the remainder returned to the county congestion management agencies for locally selected TLC/HIP projects.

Track 1 — Regional Programs (Track 1 Funds Directed By MTC)

Billions of 2001 dollars

Programs	Need	Commited Funding	Track 1 Funding
System Management and Operations	$1.0	$0.5	$0.5
Streets and Roads Maintenance (MTS pavement)	4.0	3.9	0.1
Transit Capital Rehabilitation	15.3	14.2	1.1
TLC/HIP	—	0.1	0.2
Regional Transit Expansion Program	10.5	6.9	2.0*
			Total $3.9

* The Regional Transit Expansion Program also includes $800 million in "County Priority" and "Joint Regional/ County" funds, leaving a Regional Transit Expansion Program shortfall of $800 million for the program.

Regional Transit Expansion Program (Resolution 3434)

One of the key 2001 RTP initiatives is the Regional Transit Expansion Program, adopted by the Commission as MTC Resolution 3434. The program is the successor to MTC's 1988 New Rail Starts and Extensions Agreement (MTC Resolution 1876). The 1988 rail extension program helped fund a number of projects, most of which have either been built or are now under construction. These include BART extensions to Dublin/ Pleasanton, Pittsburg/Bay Point and the San Francisco International Airport, and light-rail extensions in San Francisco and Santa Clara counties.

MTC adopted project selection criteria for the Regional Transit Expansion Program in April 2001. The program builds upon MTC's Bay Area Transportation Blueprint for the 21st Century planning effort completed in 2000, and includes both rail and express bus projects.

The core of the 1988 new starts plan was a creative financing agreement that relied heavily on local funding, particularly half-cent transportation sales tax measures that were passed by voters in Alameda, Contra Costa and San Mateo counties. The 1988 passage of the Regional Measure 1 bridge toll increase was another cornerstone of the rail program's financing package.

As with the 1988 plan, Resolution 3434 is a compendium of federal, state, regional and local funding sources. New or renewed transportation sales taxes and bridge tolls also are critical elements of the funding plan. Projects with full funding from available revenue sources are incorporated into the RTP's Track 1 program of projects. The remaining Resolution 3434 projects — those that are not fully funded within Track 1 — will be included in the Blueprint portion of the RTP as candidates for possible new funding sources.

Further detail about the Regional Transit Expansion Program can be found in the "Corridors" section of this document, as well as the companion report entitled *Regional Transit Expansion Policy: Initial Analysis* (see Attachment C).

Track 1 — County Priorities

	Billions of Dollars	Percent of Total
Roadway Expansion	$1.5	44%
Roadway Maintenance & Operations	1.0	29%
Transit Expansion*	0.6	18%
Other**	0.3	9%
Transit Maintenance and Operations	<0.1	<1%
TOTAL	$3.4	100%

* Includes $0.3 billion for Regional Transit Expansion Program projects

** Other includes bike and pedestrian improvements, TLC/HIP, system management, etc.

County Priorities

The Commission has practiced a cooperative approach to long-range planning, guided by the spirit of intergovernmental partnership that is at the core of both ISTEA and TEA 21. As an example of this, the $3.4 billion in county-level proposals for Track 1 funds in this draft RTP were largely developed by the nine Bay Area congestion management agencies (CMAs). The project priorities are based on local planning processes, including countywide transportation plans, voter-approved transportation sales tax programs, strategic plans developed for proposed transportation sales tax plans, and prior or ongoing corridor studies. All of the counties either have or are developing countywide transportation plans; some of the existing plans are being updated as a parallel process to the RTP.

Basic road maintenance and operational improvements were key county investment priorities, accounting for about $1 billion. Streets and roads expansion accounted for some $1.5 billion or about 44 percent of the counties' Track 1 recommendations, with another $600 million or 18 percent of the funds slated for transit expansion projects; this transit investment includes $300 million in county Track 1 funds directed to the Regional Transit Expansion Program. Much of this Track 1 funding will be used to supplement funding for voter-approved projects included in local transportation sales tax measures. The remaining county Track 1 share went toward transit maintenance and operations, and bicycle/pedestrian and TLC projects. (See table at left.)

Track 1 — Joint Regional / County Selection

	Billions of Dollars	Percent of Total
Highway	$0.8	62%
Transit	0.5*	38%
TOTAL	$1.3	100%

* Most of this amount funds the Regional Transit Expansion Program projects

Joint Regional/County Selection

The joint regional/county corridor investments include a proposed project list for the Interregional Transportation Improvement Program (ITIP), which is a part of the State Transportation Improvement Program. The ITIP funds are primarily used to supplement funding for projects identified in the county-level Track 1 proposals. Proposed ITIP projects are jointly developed by Caltrans, MTC and the counties.

While ITIP programming is at the discretion of the California Transportation Commission, the Bay Area typically has done very well, securing a share of the funds that is roughly proportional to the region's share of the statewide population. The ITIP funds complement other county RTP corridor investments, and also will be an integral part of the proposed Regional Transit Expansion Program funding plan.

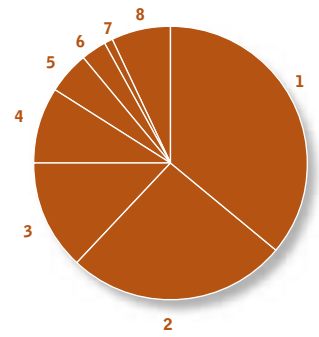
MTC expects the region to receive about $1.3 billion in ITIP funds over the next 25 years. This is about 21 percent of the projected statewide total. Of this amount, about 62 percent is slotted for investment in highway expansion projects. The remaining 38 percent is invested in transit expansion projects, most of them Regional Transit Expansion Program projects. (See table on preceding page.)

Putting It All Together

The chart on the right titled "Track 1 Funds Spending Breakdown" shows the proposed expenditure of funds by project category after summing the regional programs, the county priorities and the joint regional/county investments. The chart shows a relatively even funding distribution between the region's two major travel modes. Transit expenditures, both for maintenance and expansion, account for about 49 percent of the total Track 1 expenditures; road maintenance, operations and expansion accounts for about 40 percent of the total. Other system management and bicycle and pedestrian projects account for the remaining 11 percent.

The pie chart titled "Total RTP Expenditures" at the top of the next page shows how the total $87 billion package — Committed plus Track 1 — will be spent. Seventy-four percent of the total funding available will go to operating, maintaining and managing our existing transportation system. Another 19 percent will be used to expand the region's transit systems. The remaining quarter will maintain and expand our highway and local road network, along with other projects.

Track 1 Funds Spending Breakdown



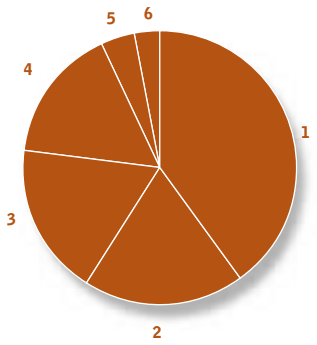
		Billions of Dollars	Percent of Total
1	Transit Expansion	$3.1	36%
2	Roadway Expansion	2.2	26%
3	Transit Rehabilitation	1.1	13%
4	Roadway Maintenance	0.8	9%
5	Roadway Operations	0.4	5%
6	TLC/HIP	0.3	3%
7	Bike/Pedestrian	0.1	1%
8	System Management / Operations	0.6	7%
	TOTAL	$8.6	100%

Advocating for New Funds — The "Blueprint"

The 1998 RTP made it clear that there was not enough money to fund key transportation improvements. Indeed, despite the fact that more than 80 percent of the RTP funds were directed toward maintaining the existing transportation system, substantial road maintenance and BART seismic retrofit shortfalls remained unfunded. Moreover, the projected growth in Bay Area population and employment demonstrated that there would be additional pressures on an already stressed transportation system.

In January 2000, MTC completed a yearlong effort to develop a Bay Area Transportation Blueprint for the 21st Century. The primary purpose of the Blueprint was to sketch a vision of the Bay Area's transportation future, without the financial constraints imposed by the RTP. The Blueprint also would serve as a ready reference in developing coherent packages of programs and projects as new funding opportunities arose.

Total RTP Expenditures



		Billions of Dollars	Percent of Total
1	Transit Operations	$35.4*	40%
2	Transit Expansion	16.4	19%
3	Transit Rehabilitation	15.9	18%
4	Roadway Maintenance and Operations	13.7	16%
5	Roadway Expansion	3.3	4%
6	Other**	2.7	3%
	TOTAL	$87.4	100%

* 36% fare revenue / 64% subsidy

** Other includes bike and pedestrian improvements, TLC/HIP, system management, etc.

The 2001 RTP revisits MTC's 2000 Blueprint effort and identifies key projects that will require new funding sources in order to be implemented over the next 25 years. Like elements of the Regional Transit Expansion Program, the 2001 RTP's Blueprint is MTC's advocacy document for new transportation revenues to not only maintain our existing transportation system, but to expand the system to keep up with projected Bay Area population and employment growth.

Key Blueprint Investments

The Blueprint has many of the same investment priorities as Track 1, calling for expenditures in a similar range of categories, including closing the $2.2 billion streets and roads maintenance shortfall, upgrading system management programs and expanding the transportation system. Projects to close critical gaps in carpool lanes, local arterials, public transit and bikeway networks, and to boost bus, rail and ferry service also are part of the Blueprint.

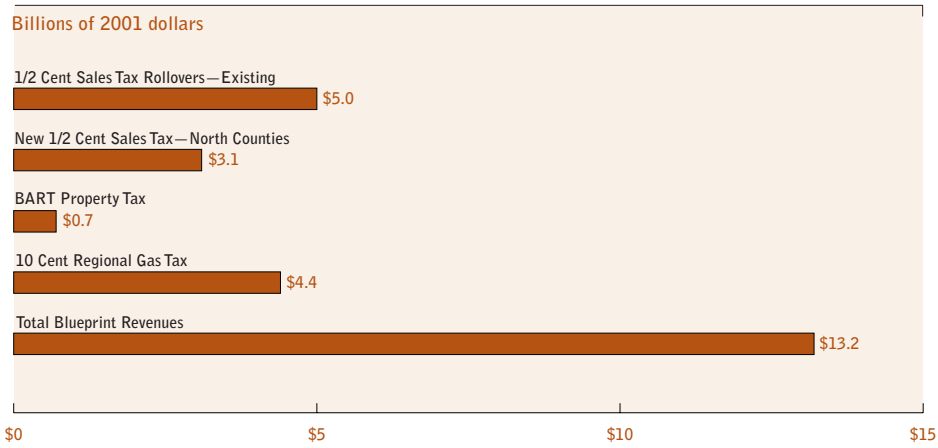
MTC has evaluated the region's transit network to determine how well it serves low-income communities and key destinations of interest to those communities. The results of this analysis (provided in full in Attachment D to this RTP) will help inform future investment in transportation choices for low-income persons. The Lifeline Transportation Network identifies bus and rail services that serve concentrations of low-income households and key destinations such as schools, jobs, health care facilities, training programs, childcare, etc. These routes have been measured against service objectives (e.g., time of day and frequency) to determine gaps in the system and preliminary options for filling these gaps. The results of this analysis will be validated and modified as necessary in local plans developed by the transit agencies and low-income communities with the support of MTC.

On a preliminary basis, the Lifeline Network analysis has identified numerous spatial and temporal gaps in the current transit network. However, the solution to filling these gaps does not necessarily involve running additional fixed route transit service. In many cases, alternative transportation services can be implemented when providing fixed route service is not cost-effective or practical or when there is a preferred approach developed by the community being served. The Commission will look to the region's transit agencies and congestion management agencies to evaluate the system gaps and recommend where fixed route services make the most sense to implement. The Commission will provide financial support to ensure community input to this planning process.

Key Blueprint Revenues

The primary funding sources for Blueprint projects may include new and renewed county-level half-cent sales taxes, a proposed regional gas tax, and a new BART property tax. These new revenue sources could generate as much as $13.2 billion for transportation investment in the region over the next 25 years. (See chart on next page.)

Potential Blueprint Revenues Available



County Sales Taxes

Five urban Bay Area counties have successfully enacted voter-approved transportation sales tax initiatives. Two of these, Santa Clara and Alameda, recently renewed their existing sales tax measures for 30 and 20 years, respectively. The sales tax measures in the remaining three counties, Contra Costa, San Francisco and San Mateo, will expire before 2010. The four northern counties also have expressed an interest in joining the so-called "self help" movement.

Regional Gas Tax

MTC has legislative authority to seek voter approval of up to a 10-cent-per-gallon gasoline tax in Bay Area counties for identified transportation improvements. Previous MTC polls have indicated some receptivity to a two- or three-cent tax, perhaps to maintain local roads ("pennies for potholes").

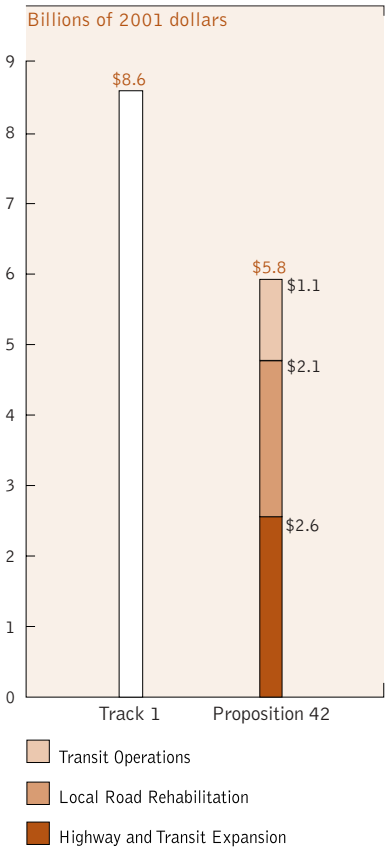
BART Property Tax

BART is considering initiating a new property tax to pay for its nearly $1 billion program to seismically retrofit its overhead and underground track structures.

Proposition 42 — Windfall for the Future

In March 2002, California voters created a new, permanent funding source for transportation with the passage of Proposition 42. This amendment to the California Constitution guarantees that proceeds from the state sales tax on gasoline will be spent for transportation purposes, according to a set formula, beginning in fiscal year 2008-09. For the Bay Area, MTC estimates that the passage of Proposition 42 will produce about $5.8 billion in new revenues over the 25-year RTP period — substantially sup-

Proposition 42: Estimated Revenues and Spending Breakdown



plementing the $8.6 billion pot of Track 1 resources. The new revenues would include about $2.1 billion for local roads, which could eventually eliminate projected road maintenance shortfalls. Proposition 42 also will provide significant funding for new transit service and roadway expansion. (See bar graph at left.)

Because Proposition 42 had not yet been passed at the time the RTP was adopted, in December 2001, the measure's $5.8 billion in projected revenues are not included in this RTP. Now that it is clear that these monies will be available to fund additional projects, MTC will consider adding new, Proposition 42-funded projects to Track 1 in future amendments to this RTP and in the next RTP update.

Although the facilities that make up the Bay Area transportation network are often grouped by type (e.g., local roads, state highways, interstate highways) or mode (train, bus, automobile), MTC finds that the best way to view this network is as a system of multimodal travel corridors. The corridors contain the most-traveled routes along the region's rail, highway and bridge networks. They provide the appropriate regional context for transportation planning, more relevant than political jurisdictions or the ownership or operation of the various infrastructure segments.

MTC has identified 16 such corridors in the Bay Area. This list includes the Bay Area taken as a whole, to highlight the ways MTC and its transportation partners deploy regional solutions to issues that cut across individual corridors. Also, for the first time, an "Interregional Gateways" corridor has been added to the list, a reflection of the increasing number of trips into the Bay Area from adjoining counties.

For each corridor, we provide a description, a summary of specific management objectives, a map, and a list of projects according to their status — Committed, Track 1 and Blueprint (see previous chapter for definitions of these terms). The Track 1 and major Blueprint projects proposed for a given corridor in this RTP are displayed on the corridor map. Project cost and funding information may be found in the relevant county listings in Attachment A.

TRAVEL CORRIDORS

SAN FRANCISCO BAY REGION

At every turn, the Bay Area presents a vast transportation system consisting of a series of streets, freeways and multiple bus, rail and ferry routes all functioning together. The transportation network includes 9,860 miles of transit and paratransit routes (including about 400 miles of rail transit), 1,400 miles of highways, over 300 miles of carpool lanes, eight toll bridges, and 19,600 miles of local streets and roads.

It also includes five public seaports (the largest being the Port of Oakland), three international airports, and over 20 smaller airports serving general aviation. Two extensive bicycle and pedestrian trails link all nine counties — the Bay Trail hugging San Francisco Bay and the Ridge Trail along the region's higher ground.

More than 20 public transit operators offer service in the region with a fleet of 4,000 buses, cable cars, rail cars and ferries. Intermodal connections strengthen links between buses, trains, ferries and airplanes to create a multimodal network for travelers.

In this section we call attention to four important MTC efforts that are regional in scope and impact — System Management, Transportation for Livable Communities/Housing Incentive Program, the Regional Transit Expansion Program, and the Lifeline Transportation Program.

Management Objectives

- Maintain roads and transit systems
- Operate the existing transportation system more efficiently and improve system reliability
- Provide travelers with up-to-date information to help them make trip decisions
- Strategically expand the transportation network at key bottlenecks
- Honor long-standing prior commitments to the public for specific transportation improvements
- Bring transportation investments into closer harmony with community development
- Improve the safety and accessibility of the regional transportation network for both motorized and non-motorized users
- Ensure that funding decisions are fair and equity is maintained between transportation agencies, modes and segments of the Bay Area population
- Improve non-motorized options

Committed Funding

Not mapped:

- New Benicia-Martinez Bridge: construct new bridge span east of existing span (4 mixed-flow lanes, 1 slow-vehicle lane and a bicycle/pedestrian pathway); includes new toll plaza and upgrades to I-680/I-780 interchange and I-680/Marina Vista Road interchange
- New Carquinez Bridge: construct new suspension bridge west of existing bridges (4 westbound lanes, including an HOV lane, plus new bicycle/pedestrian pathway) and modify Crockett interchange
- Widen San Mateo-Hayward Bridge (under construction): widen low-rise trestle and eastern approach from I-880 from 4 lanes to 6 lanes with shoulders, extend existing westbound HOV lane 1 mile west along eastern approach from I-880, construct new pedestrian/bicycle overcrossing
- San Francisco-Oakland Bay Bridge seismic retrofit, west span, and replacement, east span
- Rehabilitation and seismic retrofit of Bay Area state-owned toll bridges
- Richmond-San Rafael Bridge deck replacement
- I-880/Route 92 interchange improvements in Hayward
- Transit capital rehabilitation program (shortfall remains)
- Local streets and roads pavement/non-pavement (sidewalks, lighting, drainage, landscaping, etc.)/bridge repairs (shortfall remains)
- Dumbarton Bridge: widen Bayfront Expressway (Route 84) from Dumbarton Bridge to US 101/Marsh Road interchange
- Low-Income Flexible Transportation Program (LIFT)

Track 1

Not mapped:

- MTS road pavement shortfall (100% funding)
- Non-MTS road pavement shortfall (partial funding)
- Non-pavement street maintenance shortfall (partial funding)
- Local bridge rehabilitation shortfall (partial funding)
- Transit capital replacement shortfall (100% funding)
- Freeway Operations Strategies/Transportation Operations Systems (TOS)*
- Freeway Service Patrol*
- Roadside call boxes*
- Traffic Engineering Technical Assistance Program (TETAP)/Arterial Signal Retiming*
- Pavement Management Technical Assistance Program (P-TAP)*
- TransLink®*
- Regional transit information system and transportation marketing*
- Rideshare program*
- TravInfo®*
- Spare the Air campaign
- Performance monitoring
- Transportation for Livable Communities/Housing Incentive Program - Regional Program*
- Regional Transit Expansion Program reserve funding

Blueprint

Not mapped:

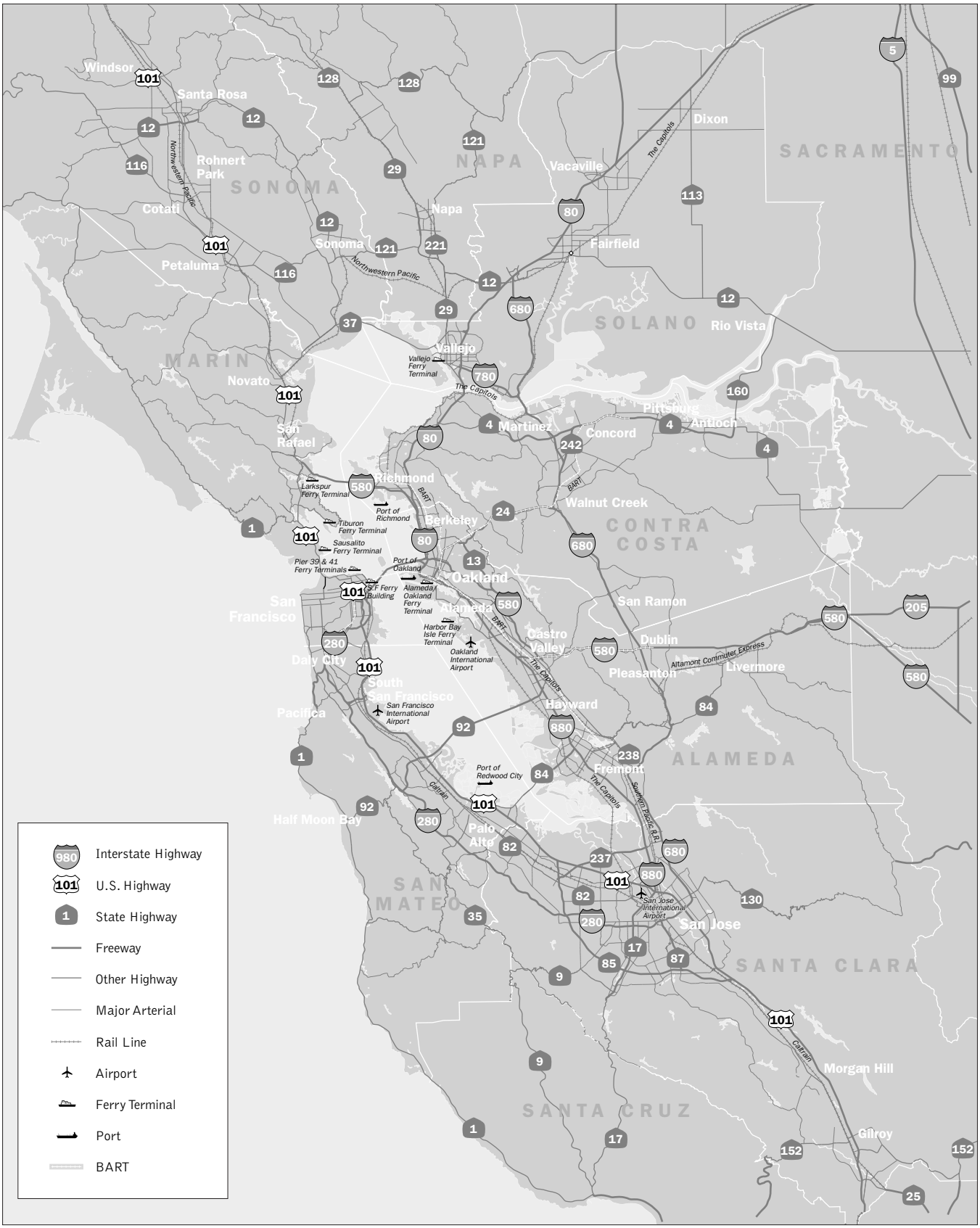
- Local street pavement shortfall
- Local street non-pavement shortfall
- Local bridge rehabilitation shortfall
- BART system seismic upgrade
- Expanded funding for Track 1 system management and customer service programs
- Clearing Lanes Effectively and Rapidly (CLEAR) incident management
- Lifeline Transportation Network
- Regional Intelligent Transportation Systems (ITS) integration
- Capitol Corridor intercity rail improvements, including new stations
- New Bay crossing options (see Transbay corridor)
- Expanded express bus program: all express bus routes not specifically called out in Track 1 and Regional Transit Expansion Program
- Expanded ferry service
- California high-speed rail with terminal in San Francisco
- California high-speed rail: extend high-speed service under Bay to Sacramento along Capitol Corridor

Regional Transit Expansion Program

Not mapped:

- BART Extension from Fremont to Warm Springs
- BART Extension from Warm Springs to San Jose
- Third Street light rail transit extension to Chinatown (Central Subway)
- BART – Oakland International Airport connector
- Caltrain downtown extension/Transbay Terminal
- Caltrain: electrification from San Francisco to Gilroy
- Caltrain: express service between San Francisco and San Jose (Phases 1 and 2)
- Downtown to East Valley: light rail and Bus Rapid Transit (Phases 1 and 2)
- Capitol Corridor: phases 1 and 2 expansion
- Bus Rapid Transit in Oakland/Berkeley/San Leandro Corridor (Phase 1)
- Regional Express Bus Program (Phase 1)
- Dumbarton rail bridge rehabilitation
- BART/East Contra Costa rail extension (right-of-way acquisition)
- BART/Tri-Valley rail extension (right-of-way acquisition)
- Altamont Commuter Express (ACE) service expansion
- Sonoma-Marin rail
- AC Transit enhanced bus: Hesperian/Foothill/MacArthur Corridors

* Projects also are included in Committed Funding and Blueprint project lists.



George Draper

The Bay Area Freeway Service Patrol's (FSP's) primary purpose is to cut down on traffic jams by quickly clearing accidents and other incidents that account for more than 50 percent of traffic congestion.

SYSTEM MANAGEMENT

Background

While the Bay Area continues to make significant strategic investments to expand the transportation system, we are increasingly choosing to design and implement improvements that focus on boosting the efficiency of the region's existing transportation network and giving users better information and travel options to make the most of the region's roadway and transit network. We call this strategy "system management."

MTC and its transportation partners provide a number of programs targeted at reducing congestion, improving traveler information and increasing access for all Bay Area travelers. MTC also works with local jurisdictions to better maintain local streets and roads as well as assist with projects that smooth the flow of traffic on local arterials. In recent years, MTC has assumed a greater regional role in designing and directly operating programs to better manage the transportation system.

Targeting Congestion and Traveler Safety

Freeway Operations

A number of interrelated programs to improve the safety and efficiency of the freeway system are under way in the Bay Area. Overseen by MTC, Caltrans and the California Highway Patrol (CHP), these include a traffic operations system, which employs high-tech devices to monitor and report on traffic, and "smart corridors," in which multiple traffic and transit control centers are managed as a single network via computer connections.

Freeway Service Patrol

The Bay Area Freeway Service Patrol (FSP) is a special team of 74 trucks — 60 tow trucks, six pickup trucks and two flatbeds (plus six back-up trucks) — that continuously patrols more than 400 miles of the Bay Area's most congested freeways. More than 116,000 assists were provided in 2001. The FSP's primary purpose is to cut down on traffic jams by quickly clearing accidents and other incidents that account for more than 50 percent of traffic congestion. A swift response also reduces the chance of further accidents and bottlenecks. The tow trucks are financed with federal, state and local monies. Local funds come from the MTC Service Authority for Freeways and Expressways (SAFE), which is financed by a $1 annual vehicle registration fee in participating counties. The service costs approximately $5 million a year to operate.

Call Box Network

The call box program provides assistance to motorists in trouble, allowing them to report a road hazard, a flat tire or a mechanical breakdown. In partnership with the CHP and Caltrans, MTC operates over 3,500 call boxes on more than 1,100 miles of urban, suburban and rural highways and expressways in the nine counties. Upon receiving a call from a call box, call answering personnel can dispatch appropriate assistance, whether a tow service or law enforcement, fire or medical service.

Managing Traffic Signal Networks

MTC's Traffic Engineering Technical Assistance Program (TETAP) provides consultant expertise for local governments that do not have the in-house staff to maintain and operate their traffic signal network. The program focuses on improving the timing of signals within and between jurisdictions to improve the flow of traffic on major roadways. MTC has provided over 100 TETAP grants to more than 60 jurisdictions, the majority with populations under 65,000.

MTC provides a wide range of information to Bay Area travelers on transportation system conditions and travel options that help promote more efficient use of the region's transportation network.

Improving Traveler Information

MTC provides a wide range of information to Bay Area travelers on transportation system conditions and travel options that help promote effective use of the region's road and transit networks.

TravInfo®

The TravInfo® telephone service — accessed via 817-1717 from any area code in the Bay Area — provides comprehensive traveler information 24 hours a day, 365 days a year. Since the project was launched in September 1996, TravInfo® has served approximately 3 million callers. MTC expects to complete the transition from 817-1717 to 511 — the new Federal Communications Commission-approved nationwide number for traveler information — in the fall of 2002. In addition, the next two years will see improved data collection on traffic conditions and enhanced information dissemination to the public. The core of TravInfo® is the operation of its Traveler Information Center, which receives and disseminates road condition and transit information to travelers through the 817-1717 number and to TravInfo®'s private sector partners via an electronic connection.

Transitinfo.org

MTC's transit information Web site — transitinfo.org — provides transit service information (schedules, fares, maps, announcements, etc.) and links for over 40 public and private transit services throughout the MTC region and in neighboring areas. The site also includes information about and links to regional programs, such as bicycle programs and airport and ridesharing services, as well as transit lines that serve major Bay Area destinations. Currently, the site is averaging more than 438,000 users per month.

Motorola, Inc.

The TransLink® universal transit fare card debuted in a pilot project in early 2002.

Regional Transit Trip Planning

Working closely with Bay Area transit agencies, MTC is implementing a regional transit trip planning system to provide comprehensive, multimodal transit itinerary planning services to the public. When fully expanded by the end of 2002, the system will combine route, schedule and fare information for all Bay Area transit agencies in a central, frequently updated database.

The trip planning system can be accessed in two ways: through transit agency call centers and directly over the Internet. Call center operators at AC Transit, BART and Muni can access the trip planning system. Direct public access to trip planning services is available over the Internet through MTC's transit information Web site, <www.transitinfo.org>.

Making Connections

TransLink®

TransLink® is a smart-card-based universal ticket that will be good on all of the region's mass transit systems. TransLink® is designed to (1) improve passenger convenience in making inter- and intra-agency trips; (2) improve the efficiency and security of the region's fare collection systems; (3) improve transit system data collection for service planning purposes and development of fare policies; and (4) take advantage of revenue-enhancing or cost-saving business partnerships with the private sector. The Phase 1 TransLink® demonstration is being implemented in 2002 on selected portions of six transit operators — AC Transit, BART, Caltrain, Golden Gate Transit, San Francisco Muni and Santa Clara Valley Transportation Authority (VTA). Approximately 4,000 transit riders will use TransLink® for a six-month period and evaluate the system's capabilities. Full implementation on all of the region's transit systems will depend on the outcome of this demonstration phase.

Regional Rideshare Program

The regional rideshare program is designed to help Bay Area travelers who wish to use transportation alternatives to driving alone — including public transit, carpooling, vanpooling, bicycling, walking and telecommuting. Through a contract with MTC, RIDES for Bay Area Commuters uses an automated ride-matching system to produce match lists and assist commuters in forming carpools and vanpools. The program also assists the region's employers in promoting transportation alternatives to their employees, including the use of tax-free benefit programs for subsidizing employees' transit and vanpool costs.

Smoothing the Ride

Maintaining the Region's Pavement

MTC's Pavement Management System (PMS) provides computer software and technical assistance to help cities and counties extend the life of pavement and therefore stretch local budgets further. Ninety-three cities and eight counties in the Bay Area use MTC's PMS program. The program also is used outside the region in Southern California and in 11 states and one province in Canada. The PMS has been essential in identifying the extent of local street maintenance needs and the shortfalls in funding to address them.

Acorn-Prescott

The aptly named Transportation for Livable Communities (TLC) program is lavishing some "tender loving care" on town centers, transit hubs and key streets.

TRANSPORTATION FOR LIVABLE COMMUNITIES/ HOUSING INCENTIVE PROGRAM

In 1998, MTC launched the Transportation for Livable Communities (TLC) program, which aims to lavish some "tender loving care" on Bay Area town centers, public transit hubs, streetscapes and pedestrian facilities. The program is designed to foster community vitality and to link transportation investments to local development and redevelopment efforts. To date, the TLC program has provided a total of $37 million in planning and capital grants to help cities and nonprofit agencies develop transportation-related projects.

In November 2000, the TLC program was expanded to include a Housing Incentive Program (HIP), which encourages the location of compact, affordable housing at key transit stops throughout the region. MTC initially set aside $9 million to provide "seed money" directly to jurisdictions that develop compact communities in the vicinity of public transit hubs. In July 2001, MTC awarded $9 million in the first round of HIP grants to 15 cities.

The TLC/HIP programs are slated for increased funding in this RTP.

LIFELINE TRANSPORTATION PROGRAM

In 1997, MTC launched a series of county transportation plans specifically focused on addressing the transportation barriers faced by low-income persons who are moving from welfare to work. Several regional strategies emerged from these plans, including improvements in public transit services, piloting cost-effective alternatives to fixed route transit and non-transit options, a comprehensive assessment of the region's transit network measured against location, time of day and frequency of service objectives, and an analysis of barriers due to the cost of transportation. The Commission supported the

implementation of these strategies with the adoption of the Regional Welfare to Work Plan in June 2001. While the focus of this initial work was on the transportation concerns generated by welfare reform, the resulting strategies are relevant to the transportation needs of low-income persons generally. The Commision will pursue these strategies as follows:

LIFT Program

The welfare to work transportation planning resulted in a number of strategies that were ready for local implementation. These included improvements to existing fixed route services and innovative transportation alternatives where fixed route solutions were not considered practical or cost-effective (e.g., demand-responsive van and taxi service, guaranteed ride home programs, etc). In response, the Commission established the Low-Income Flexible Transportation Program (LIFT), which committed $5 million in federal discretionary funds and leveraged an additional $5 million in local social services and transportation funding through a 50/50 matching requirement. The Commission is supplementing this initial investment through the commitment of $1 million in State Transit Assistance regional discretionary funds per year and advocacy for annual federal appropriations from the Job Access and Reverse Commute program ($3 million was secured in fiscal year 2001-02).

Lifeline Transportation Network

For this 2001 RTP, the Commission conducted a comprehensive assessment of the region's public transit system that identifies a Lifeline Transportation Network and the spatial and temporal gaps in that network affecting low-income communities. In response to the findings and recommendations from the Lifeline Transportation Network analysis and coordination with the RTP Social Equity analysis, MTC will provide financial support to conduct community transportation plans in 10 communities that have the highest concentrations of low-income persons in the region. These community transportation plans will be used to validate and modify, if necessary, the results of the Lifeline analysis at the local level. MTC is working with the transit agencies, congestion management agencies and members of the communities to fill the gaps identified in the Lifeline analysis.

The passage of Proposition 42 in March 2002 means the State Transit Assistance (STA) fund will contribute an additional $42 million per year (beginning in fiscal year 2008-09) to Bay Area transit agencies directly and $11 million per year to the region's STA discretionary program. The Commission will consider this funding source to partner with the transit agencies and other local partners to implement additional transportation services identified through the Lifeline Transportation Network analysis and follow-on local planning.

Transportation Affordability

MTC's Regional Welfare to Work Plan recommends that the Commission work with multiple stakeholders (transportation providers, social services agencies, schools, employers, and other organizations) to address barriers associated with the cost of transportation for low-income persons. This issue requires a commitment from many entities to tackle a very difficult issue, since transportation subsidies take many forms today and are sponsored by multiple funding programs, such as social services agencies, employers, and transit agencies. The Commission will initiate this effort in 2002.

In a related effort, the Commission has agreed to provide financial support to implement a free transit pass program for low-income students in the AC Transit service area. As part of the transportation affordability analysis described above, MTC will undertake a pilot program to evaluate the impact of subsidized transit passes on low-income students' attendance at school and after-school programs. This pilot will include two components: implementation and evaluation of a two-year pilot program in the AC Transit service area, contingent upon matching funds from local agencies, and evaluation of reduced-fare programs already adopted by other transit agencies in the Bay Area and elsewhere.

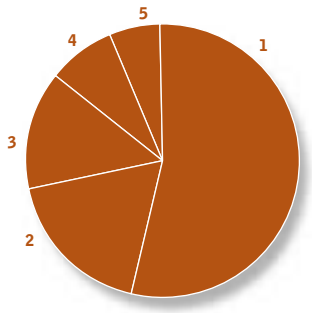
REGIONAL TRANSIT EXPANSION PROGRAM

The Regional Transit Expansion Policy (Resolution 3357) and Program of Projects (Resolution 3434) are two significant efforts developed in parallel with the 2001 Regional Transportation Plan. Taken together, the policy and program represent the successor to the region's Regional Rail Agreement of 1988 (Resolution 1876). Expanding the vision of Resolution 1876, which delivered five new rail extensions throughout the Bay Area, Resolution 3434 identifies nine new rail extensions, a new regional express bus program, and significant service enhancements to eight existing rail and bus corridors, as illustrated in the maps on pages 76-77.

The key financial and service characteristics of the overall $10.5 billion program are as follows.

- 84 percent of the program represents fully funded projects included in the 2001 RTP.
- 80 percent of the funded program is financed from non-federal sources.
- If fully implemented the program would:
  - provide 140 new route miles of rail;
  - provide 600 new route miles of express bus;

Resolution 3434
Funding by Source



	Source	Billions of Dollars	Percent of Total
1	Local	$ 5.7	54%
2	Federal	$ 1.9	18%
3	State	$ 1.5	14%
4	Regional	$ 0.6	6%
5	Shortfall	$ 0.8	8%
	TOTAL	$10.5	100%

- achieve a 58 percent average increase in service levels for existing corridors;
- serve 38.6 million new riders per year;
- make key transit network connections between southern Alameda County and the Silicon Valley, provide a new southern transbay link, enhance the Bay Area's central transit hub in San Francisco, and extend the reach of rail to the North Bay and the outer East Bay.

A distinguishing element of the regional transit expansion effort was the development of specific financial and performance criteria to assist in the evaluation of rail and express/rapid bus candidates. Resolution 3357, adopted by the Commission in April 2001, established the factors that were applied in the criteria evaluation included in Resolution 3434. The evaluation matrix on pages 72-73 presents the analysis and the adopted Program of Projects included in Resolution 3434.

Resolution 3434 includes a detailed financial strategy assigning funding from local, regional, state and federal sources among the various projects. For those projects that are not yet fully funded, the Commission has assigned priority to advocate for additional funds. As part of the financial strategy, specific terms and conditions are stipulated for both funding sources and individual projects to ensure accountability and clarity among project sponsors and the Commission. (See the table on pages 74-75 for details on the Resolution 3434 funding strategy.)

Financial Criteria

Honor 1876 Commitments: Assigns priority to those projects of the original seven "Tier 1" Resolution 1876 projects that did not yet have a defined and secured financial agreement.

TEA 21/Federal Reauthorization: Indicates whether current federal financial support exists for the project, through TEA 21 authorizing language for New Starts funding, or other federal appropriation commitments.

Traffic Congestion Relief Program (TCRP)/State Commitments: Indicates whether a state financial commitment has been secured by the project, through TCRP funds or other existing state funding commitments.

Dedicated Local Funding: Extent of local financial commitment for the project, based on percentage of local funds to total capital costs. (Ratings: "High": greater than 50 percent; "Medium": 30 percent to 50 percent; "Low": under 30 percent.)

Operations/Maintenance: Determines whether project can be maintained and operated once built, based on financial plans and policies submitted by the project sponsor, outlining sources and commitments of funds for the period of operations through the end of the RTP (2025) or for at least 10 years, whichever is longer. Any financial burden imposed by the transit expansion project may not undermine core bus service within the same system, especially service needed by transit-dependent persons.

Performance Criteria

Supportive Land Use: Evaluates potential system benefits accrued as a result of adjacent land uses along rail/bus corridors, based on year 2025 projected net residential and employment land-use densities around planned stations or transit corridors. (Ratings: "High": urban or urban core/central business district; "Medium": suburban; "Low": rural or rural suburban.)

Cost-Effectiveness: Shows "cost per new rider," measured as dollars per new rider, counting only riders that shift from auto to transit, not from transit to transit. ("High": $0 - $15/new rider; "Medium": $16 - $30/new rider; "Low": over $30/new rider.)

Resolution 3357 also provides for another measure of cost effectiveness: "transit user benefits." These will be incorporated into the cost-effectiveness analysis at a later date once the methodology is available from the Federal Transit Administration.

System Connectivity: Assesses the interconnected relationship of the transit expansion projects and the existing transit network, through measures of connections, service frequency and gap closures.

> **Number of Connecting Operators:** "High": five or more; "Medium": three to four; "Low": one to two.
>
> **Frequency (Peak Period Headways):** "High": 10 minutes or less; "Medium": 20 minutes to 11 minutes; "Low": greater than 20 minutes.
>
> **Gap Closures:** "Yes" or "No" for completion of a major closure in the regional network.

System Access: Determines the ability of users to easily access (via walking, biking, auto or transit transfers) the new extensions, based on number of modal access options. ("High": four or more; "Medium": three; "Low": one to two.)

Project Readiness: Assigns priority to projects that are able to proceed expeditiously to implementation, based on pre-construction activities completed or in progress as of December 2001. ("High": corridor evaluation, environmental analysis and preliminary design and engineering; "Medium": corridor evaluation and environmental analysis; "Low": sketch planning or corridor evaluation only.)

High, Medium and Low

Here at a glance are the criteria used to assign projects a high, medium or low rating within a given category (See pages 72-73).

- H **High**
- M **Medium**
- L **Low**

Dedicated Local Funding
- H Greater than 50%
- M 30% to 50%
- L Under 30%

Supportive Land Use
- H Urban or urban core/ central business district
- M Suburban
- L Rural or rural suburban

Cost-Effectiveness
- H $0 to $15/ new rider
- M $16 to $30/new rider
- L Over $30/new rider

System Connectivity: Number of Connecting Operators
- H 5 or more
- M 3 to 4
- L 1 to 2

System Connectivity: Frequency
- H 10 minutes or less
- M 20 minutes to 11 minutes
- L Greater than 20 minutes

System Access
- H 4 or more modes
- M 3 modes
- L 1 to 2 modes

Project Readiness
- H Corridor evaluation, environmental analysis and preliminary design and engineering
- M Corridor evaluation and environmental analysis
- L Sketch planning or corridor evaluation only

Resolution 3434: Regional Transit Expansion Program — Evaluation Matrix

Project	Sponsor[1]	Project Cost (millions/2001$)	Resolution 1876-Tier 1 Prior 1876 Tier 1 Commitment	TEA 21 Funds TEA 21 Authorization or Other Federal Appropriations	TCRP TCRP or Other State-level Commitments	Dedicated Local Funding Local Funds as a Percent of Total Capital Cost
BART to Warm Springs	BART	$634	Yes	Yes	Yes	H
BART Warm Springs to San Jose	VTA	$3,710	No	Yes	Yes	H
Muni 3rd St. Light Rail Transit Phase 2 - **New Central Subway**	SFCTA/Muni	$647	No	Yes	Yes	M
BART/Oakland Airport Connector	BART	$232	No	Yes	No	M
Caltrain Downtown Extension/ Rebuilt Transbay Terminal	SFCTA	$1,885	Yes	Yes	No	H
Caltrain Rapid Rail/Electrification	JPB	$602	No	No	No	H
Caltrain Express Phase 1	JPB	$127	No	No	Yes	L
Downtown to East Valley: Light Rail and Bus Rapid Transit Phases 1 and 2	VTA	$518	No	No	No	H
Capitol Corridor Phase 1 Expansion	CCJPA	$129	No	No	Yes	L
AC Transit Oakland/San Leandro Bus Rapid Transit Phase 1 (Enhanced Bus)	AC Transit	$151	No	No	No	L
Regional Express Bus Phase 1	MTC/Transit Operators	$40	No	No	Yes	L
Dumbarton Rail	JPB	$129	No	No	No	H
BART/East Contra Costa Rail Extension	CCTA	$345	No	No	Yes	L
BART/Tri-Valley Rail Extension	ACCMA	$345	No	No	Yes	L
Altamont Commuter Express (ACE) Service Expansion	ACE	$121	No	No	No	L
Caltrain Express Phase 2	JPB	$330	No	No	No	H
Capitol Corridor Phase 2 Enhancements	CCJPA	$284	No	No	Yes	L
Sonoma-Marin Rail	SMART	$200	No	No	Yes	L
AC Transit Enhanced Bus Hesperian/Foothill/MacArthur Corridors	AC Transit	$90	No	No	No	L

[1]**Sponsors:**

AC Transit Alameda-Contra Costa Transit District
ACCMA Alameda County Congestion Management Agency
ACE Altamont Commuter Express (rail service)
BART Bay Area Rapid Transit District
CCJPA Capitol Corridor Joint Powers Authority
CCTA Contra Costa Transportation Authority
JPB Joint Powers Board (Caltrain)
MTC Metropolitan Transportation Commission
SFCTA San Francisco County Transportation Authority
SMART Sonoma-Marin Area Rail Transit
VTA Santa Clara Valley Transportation Authority

Operations/ Maintenance	Supportive Land Use		Cost-Effectiveness	System Connectivity			System Access	Project Readiness
Demonstrated Operating Plan	Residential Densities Around Stations	Employment Densities Around Stations	Cost Per New Transit Rider	Number of Connecting Operators	Frequency	Regional Gap Closures	Number of Modal Access Options	Number of Pre-construction Activities Completed or in Progress
Yes	M	M	M	M	H	No	H	M
Yes	H	M	M	H	H	Yes	H	L
Yes	H	H	L	H	H	No	H	H
Yes	M	M	H	M	H	Yes	H	M
Yes	H	H	L	H	H	Yes	H	M
Yes	M	H	L	H	M	No	H	M
Yes	M	H	H	H	M	No	H	H
Yes	H	M	L	H	H	No	H	M
Yes	H	M	H	H	L	No	H	M
Yes	H	H	H	L	H	No	H	L
Yes	—	—	H	M	—	Yes	H	H
No	M	M	L	H	L	Yes	H	L
No	—	—	—	—	—	—	—	L
No	—	—	—	—	—	—	—	L
—	M	M	H	M	L	No	M	—
—	M	H	—	H	—	No	H	—
Yes	H	M	—	H	L	No	H	M
No	L	M	—	H	L	No	H	L
—	H	M	H	L	H	No	H	—

H High M Medium L Low

See pages 70-71 for more information

NOTE: "—" indicates that complete information is not available

Resolution 3434: Regional Transit Expansion Program — Funding Strategy

(Project Cost/Funding in Millions of 2001 Dollars)

Project	Sponsor	Project Cost	Committed Funding				
			TCRP	Sales Tax	Resolution 1876	RTIP/STP/ CMAQ	Other
BART to Warm Springs[1]	BART	634	111	193	205	25	12
BART Warm Springs to San Jose[2]	VTA	3,710	614	2,262			
Muni 3rd Street Light Rail Transit Phase 2 — **New Central Subway**	SFCTA/Muni	647	140			75	
BART/Oakland Airport Connector[3]	BART	232		75		44	37
Caltrain Downtown Extension/Rebuilt Transbay Terminal[4]	SFCTA	1,885		27		23	1,573
Caltrain Rapid Rail/ Electrification[5]	JPB	602		345		47	95
Caltrain Express Phase 1	JPB	127	127				
Downtown to East Valley Light Rail and Bus Rapid Transit Phases 1 and 2[6]	VTA	518		518			
Capitol Corridor Phase 1 Expansion[7]	CCJPA	129	10			3	18
AC Transit Oakland/San Leandro Bus Rapid Transit Phase 1 (Enhanced Bus)	AC Transit	151		23		17	
Regional Express Bus Phase 1	MTC	40	40				
Dumbarton Rail	JPB	129		117			
BART/East Contra Costa Rail Extension[8]	CCTA/BART	345		59		20	
BART/Tri-Valley Rail Extension[9]	ACCMA/BART	345		10		16	47
Altamont Commuter Express (ACE) Service Expansion	ACE	121		32			
Caltrain Express Phase 2	JPB	330		140			
Capitol Corridor Phase 2 Enhancements[7]	CCJPA	284	18			18	
Sonoma-Marin Rail[10]	SMART	200	37				28
AC Transit Enhanced Bus Hesperian/Foothill/MacArthur Corridors	AC Transit	90					
TOTAL		**$10,519**	**$1,097**	**$3,801**	**$205**	**$288**	**$1,810**

Notes:

[1]'Other' funding includes $12 million in BART funds. Resolution 1876 includes $60 million in RM-1 payback and $145 million in San Mateo buy-in.

[2]Assumes swap of $111 million in TCRP funds from BART to San Jose to the Warm Springs project. Sales tax includes adjustment to 2001 dollars, $50 million from Measure B commuter rail, and $118 million in Measure A contingency. Budget assumes $35 million in TCRP and $12 million in RABA funds washed to the county for off-budget right-of-way costs.

[3]'Other' funding includes $25 million in Port of Oakland and $12 million in city of Oakland funds.

[4]'Other' refers to $1.2 billion land sales and tax increment financing equivalent to provisions of AB 1419 (split $1,036 million for the Transbay Terminal (TBT) and $164 million for the Downtown Extension project), $311 million in net operating revenues from the TBT, and $62 million in Bay Area Toll Authority (BATA) bridge toll subsidy. Sales tax is San Mateo Measure B. STP/CMAQ/RTIP funding is San Francisco share.

[5]'Other' refers to $20 million in salvage value from sale of diesel engines and $75 million in Section 5309 funds for the replacement of 30 existing diesel trains with electric train units. Sales tax is $108 million in San Mateo Measure B and $237 million in Santa Clara Measure A funds. $47 million in STP/CMAQ/RTIP funding is San Francisco's share. Final sales tax and STP/CMAQ/RTIP funding will be as provided by the Joint Powers Agreement, as it currently exists or as it may be amended.

[6]Measure A sales tax adjusted to 2001 dollars

[7]Capitol Corridor service expansion will result in 16 daily round trips between Oakland and Sacramento/San Jose (includes Alviso second track). Intercity Rail ITIP funds are assumed for Phase 1 track improvements and additional service enhancements in Phase 2.

[8]The total cost includes funding for a right-of way element of this project with a cost of $95 million — comprised of $33 million in sales tax, $20 million in STP/CMAQ/RTIP, and $42 million in RM-1 Rail.

[9]The total cost includes funding for a right-of way element of this project with a cost of $80 million — comprised of $10 million in sales tax, $16 million in STP/CMAQ/RTIP, $47 million in Livermore Impact Fees, and $7 million in RM-1 Rail.

[10]'Other' funds include $28 million in Proposition 116 funding.

Regional Discretionary Funding							Blueprint Funds	
Section 5309 New Starts	RM-1 Rail	ITIP	Section 5309 Bus	AB 1171	CARB/ AB 434	**Shortfall**	Prop. 42 RTIP	Sales Tax
	8	80				—		
834						—		
432						—		
	31	45				—		
	53	59		150		—		
		65			50	—		
						—		
						—		
		98				—		
			111			—		
						—		
		12				—		✔
	52			115		99	✔	✔
	32			95		145	✔	
		15				74	✔	
						190	✔	✔
		99				149	✔	✔
						135	✔	✔
			27			63	✔	
$1,266	**$176**	**$473**	**$138**	**$360**	**$50**	**$855**		

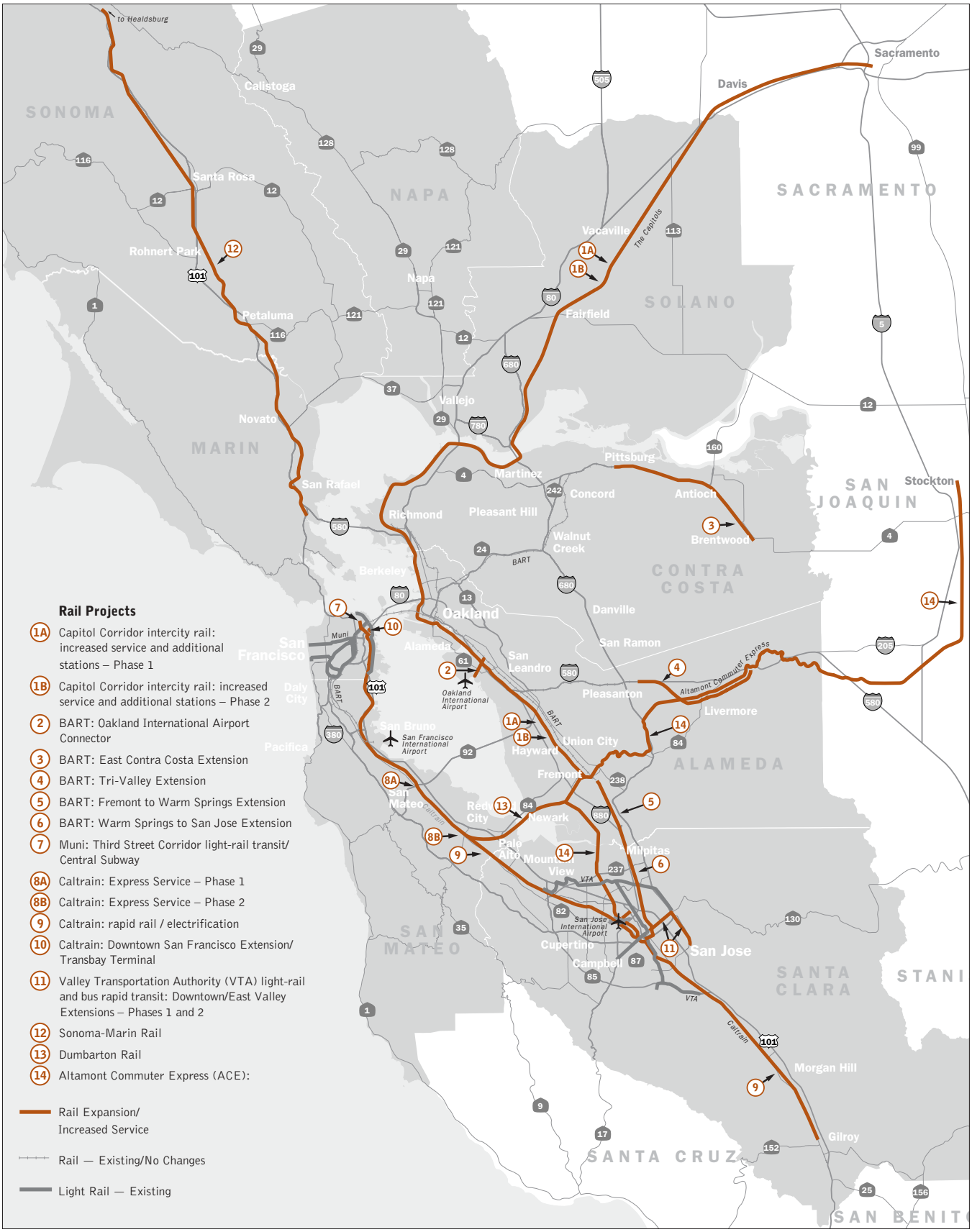
Sponsors:

AC Transit	Alameda-Contra Costa Transit District
ACCMA	Alameda County Congestion Management Agency
ACE	Altamont Commuter Express (rail service)
BART	Bay Area Rapid Transit District
CCJPA	Capitol Corridor Joint Powers Authority
CCTA	Contra Costa Transportation Authority
JPB	Joint Powers Board (Caltrain)
MTC	Metropolitan Transportation Commission
SFCTA	San Francisco County Transportation Authority
SMART	Sonoma-Marin Area Rail Transit
VTA	Santa Clara Valley Transportation Authority

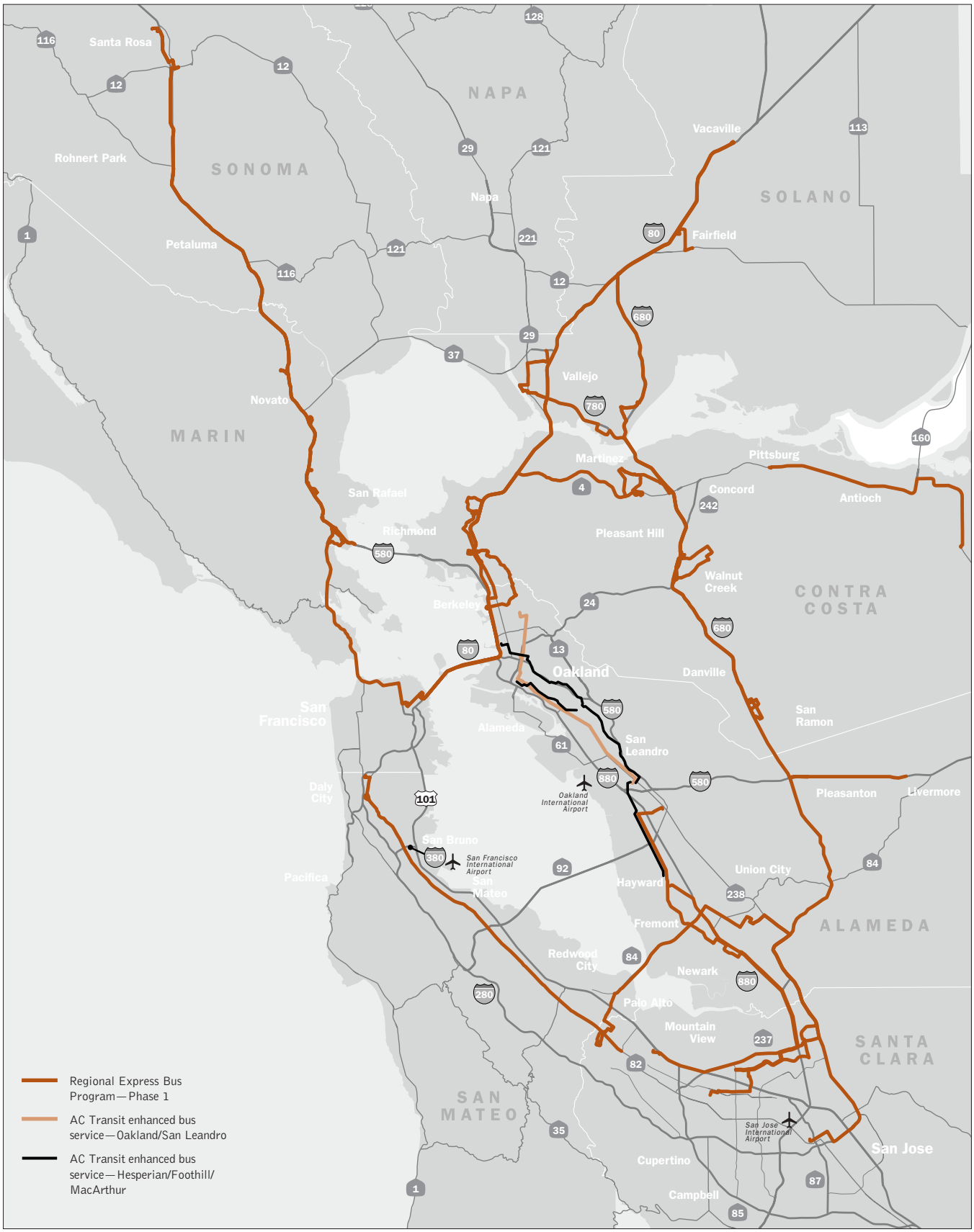
Funding programs:

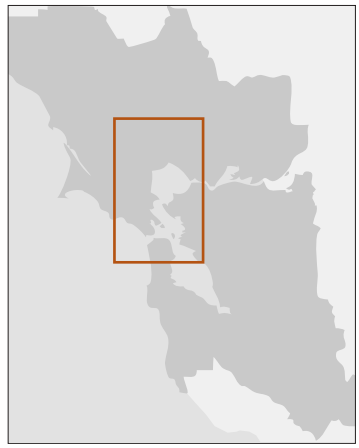
AB 434	Regional air quality funds (regional)
AB 1171	Toll bridge seismic surcharge funds (regional)
CARB	California Air Resources Board clean fuel funds (state)
CMAQ	Congestion Mitigation and Air Quality Improvement Program (federal)
ITIP	Interregional Transportation Improvement Program (state)
Prop. 42	Transportation revenue ballot measure, March 2002 (state)
RABA	Revenue Aligned Budget Authority (federal)
RM-1	Regional Measure 1 toll bridge funds (regional)
RTIP	Regional Transportation Improvement Program (state)
Sales Tax	New or renewed county sales taxes (local)
Section 5309	Discretionary transit New Starts and bus funds (federal)
STP	Surface Transportation Program (federal)
TCRP	Traffic Congestion Relief Program (state)

Regional Transit Expansion Program — Rail Projects



Regional Transit Expansion Program — Express and Rapid Bus Routes





GOLDEN GATE

A landmark for over 60 years, the Golden Gate Bridge connects this North Bay corridor with San Francisco. The corridor's spine is U.S. 101, which links San Francisco, Marin and Sonoma counties and is the gateway to northern California. A partially inactive rail right of way parallels U.S. 101 from the northern boundary of the corridor to Larkspur, although limited rail freight service extends only as far south as Novato.

Golden Gate Transit provides bus service on U.S. 101 between San Francisco and Sonoma counties and ferry service to San Francisco from Larkspur and Sausalito. The Larkspur Ferry Terminal is a major intermodal facility for bus and ferry service. Sonoma County Transit provides intercity transit in Sonoma County; several other transit operators provide intracity service and connect to Golden Gate or Sonoma County Transit.

The majority of residential and job growth in the corridor is projected to be in Sonoma County. U.S. 101 also is a regional freight corridor linking the Bay Area with the rest of northern California.

Management Objectives

- Maximize travel time benefits for high-occupancy vehicle lanes and transit in entire corridor
- Protect operational capability of reliever routes to U.S. 101 for short trips during the peak period
- Maintain interchange spacing and ensure improvements to connecting east-west routes do not adversely affect operations on U.S. 101
- Develop ramp-metering plan for U.S. 101 at key access points to balance access for local and through trips
- Maintain reliable U.S. 101 operations in off-peak period for freight mobility
- Expand commute-period transit options in corridor
- Improve transit service between cities
- Develop bicycle and pedestrian travel options for commuting, recreation and tourism
- Develop bicycle and pedestrian access to existing and future rail and ferry facilities

Committed Funding

Not mapped:

- Golden Gate Bridge seismic retrofit — Phases 1 through 3
- U.S. 101 northbound and southbound HOV lanes from Route 12 to Steele Lane in Santa Rosa; includes interchange modifications at Steele Lane and College Avenue
- U.S. 101 HOV lanes from North San Pedro Road to Lucky Drive in San Rafael
- Golden Gate Bridge moveable median barrier
- U.S. 101/Arata Lane interchange improvements in Windsor (Phase 2)
- U.S. 101/Lucas Valley Road interchange improvements in San Rafael
- Route 12/Farmers Lane partial interchange improvements
- Sir Francis Drake Boulevard improvements
- Reconstruct and upgrade Stony Point Road from Pepper Road to Petaluma city line
- Sonoma-Marin Rail station site acquisitions/upgrades
- Doyle Drive environmental study
- Regional Express Bus Program: U.S. 101/ Santa Rosa to San Rafael/San Francisco
- U.S. 101 southbound auxiliary lane between Route 116 to East Washington
- U.S. 101/Route 116 separation: improve Route 116 onramp to southbound U.S. 101
- U.S. 101/Route 116 east separation: replace bridge over separation and improve onramp to U.S. 101 (from Petaluma River bridge to north of U.S. 101/Route 116 east separation and overhead)
- Tennessee Valley (Coyote Creek) Bridge replacement
- Redwood Landfill overcrossing
- Widen Commerce Boulevard from 2 lanes to 3 lanes from U.S. 101/Wilfred Avenue interchange to Redwood Drive Golf Course in Rohnert Park

Track 1

1. Freeway-to-freeway interchange improvements; includes new bridge from west I-580 to south U.S. 101 (design phase only) and new lane west I-580 to north U.S. 101 to 2nd Avenue
2. U.S. 101/Tamalpais interchange improvements
3. U.S. 101/Lucas Valley Road interchange improvements
4. U.S. 101/Atherton Avenue interchange improvements: signalize Atherton Avenue/Binford Road intersection
5. Expanded Manzanita park-and-ride lot
6. Widen U.S. 101, adding an HOV lane in each direction, from Route 37 to the Sonoma County line and convert some portion from expressway to freeway (Sonoma-Marin Narrows project)
7. U.S. 101/Sir Francis Drake Boulevard improvements (environmental study only)
8. U.S. 101/Tiburon Boulevard interchange improvements: widen southbound offramp
9. Doyle Drive replacement – U.S. 101 south of the Golden Gate Bridge
10. North Coast Railroad Authority (NCRA) track maintenance and rehabilitation
11. Widen U.S. 101 (adding an HOV lane in each direction) from Rohnert Park Expressway north through Wilfred Avenue interchange; includes reconstruction of the Wilfred Avenue interchange and reconfiguring local streets
12. Widen U.S. 101 (adding HOV lanes in each direction) from Old Redwood Highway in Petaluma north to Rohnert Park Expressway
13. Widen U.S. 101 HOV lanes (adding an HOV lane in each direction) from Steele Lane north to Windsor River Road; includes River Road ramp improvements and northbound and southbound auxiliary lanes

Not mapped:

- Local Marin bus service enhancements (capital only)
- Non-capacity increasing improvements to street and road projects as identified in Sonoma County Transportation Authority Countywide Transportation Plan

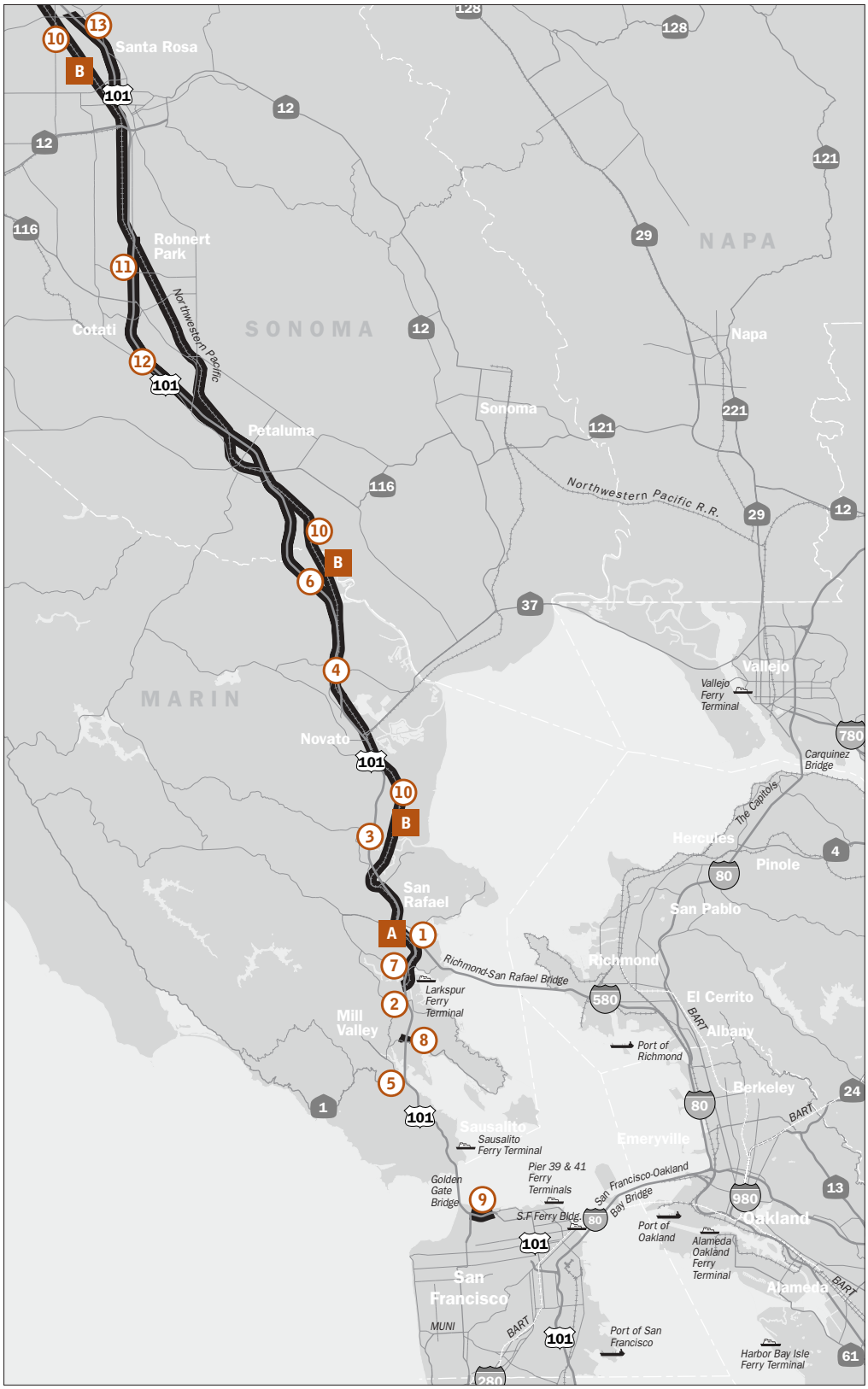
Blueprint

A. I-580/U.S. 101 interchange improvements (new westbound I-580 to southbound U.S. 101 connector and new lane westbound I-580 to northbound U.S. 101 to 2nd Avenue)

B. Sonoma-Marin Rail passenger service from Cloverdale in Sonoma County to San Rafael in Marin County

Not mapped:

- Additional interchange improvements in Golden Gate Corridor (beyond improvements funded in Track 1)
- Sonoma-Marin Rail service extension to connect to Larkspur Ferry terminal/San Quentin (assumes new land use)



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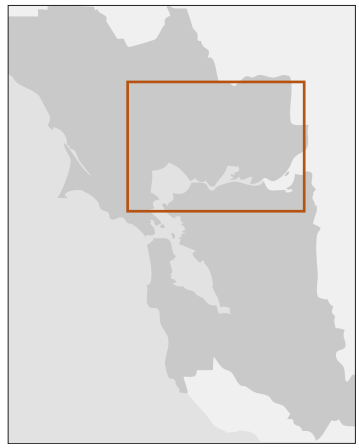
- Track 1 Project
- Blueprint Project
- Interstate Highway
- U.S. Highway
- State Highway
- Freeway
- Other Highway
- Major Arterial
- Rail Line
- Ferry Terminal
- Port
- BART



NORTH BAY EAST-WEST

There is a strong connection in the North Bay corridor between transportation, wetlands and the development of a recreational trail system. This corridor extends in an east-west direction from Route 12 at the Solano/Sacramento county line in the east, to U.S. 101 in Marin/Sonoma counties to the west, including Routes 37, 12, 116 and 121. Route 37 is the corridor's major transportation spine and is a two- to four-lane facility with a safety barrier over most of the two-lane section that traverses a nationally significant wetland habitat area.

Travel is largely generated by the communities of Petaluma, San Rafael, Novato, Vallejo and Fairfield, which anchor the western and eastern ends of the corridor. The area is primarily open space and agricultural land interspersed with smaller communities. A former military base (Mare Island) is being master-planned for new development. The corridor serves a mix of recreation destinations — including wineries, Marine World theme park and Sears Point Raceway — as well as agricultural and commute travel.

Safety and operational projects are the predominant proposed improvements on Routes 12, 116 and 121. Improvements to Route 37 are constrained by the wetlands and will likely require the approval of the Bay Conservation and Development Commission and federal resource protection agencies.

Management Objectives

- Improve operations and safety on Route 116 between Petaluma and Sonoma Valley, on Route 12 east of Interstate 80 and on Route 121 between Routes 12 and 29
- Protect and enhance wetland resources and provide managed public access when making transportation improvements
- Establish a basic level of transit mobility in the corridor
- Improve bicycle and pedestrian options for commuter and recreational travel
- Improve operations for commercial/agricultural vehicles
- Coordinate traffic management strategy for Route 37 with strategy for Routes 12/121/116 (see Napa Valley corridor)
- Develop access improvements for reuse of former Mare Island Navy base

Jeanne Perkins

Committed Funding

Not mapped:

- Route 37 from Napa River Bridge to Route 29: upgrade from 2-lane to 4-lane freeway (not including Route 29/37 interchange), planting, and environmental mitigation
- Route 29/Route 37 interchange improvements in Vallejo
- Route 12 safety improvements between Suisun City and Rio Vista (reduce bumps and dips in the roadway and extend passing lanes)
- Route 121 traffic signal system and channelization at 8th Street
- Rehabilitate Route 12, widen shoulders and replace bridge near Kenwood between Sonoma Creek to Boyes Boulevard
- Rehabilitate and widen Route 116 betweeen Elphick Road to Redwood Drive in Sebastopol and Cotati

Track 1

1. Route 37 traveler information system
2. Route 29/12/121 (Stanly Ranch) intersection improvements
3. Route 12/29/221 (Soscol Avenue) intersection improvements
4. Widen Route 12 (Jameson Canyon) from I-80 in Solano County to Route 29 in Napa County from 2 lanes to 4 lanes
5. Route 12/29 (Airport Road) grade separation
6. Operational projects on Routes 12/116/121
7. Operational and safety improvements on Route 12 from Sacramento River to I-80 (Phase 1)

Blueprint

A Safety improvements on Route 121

B Widen Route 29 to 6 lanes from Route 221 to Route 29/12/Airport Road

C Widen American Canyon Road to 4 lanes from Route 29 to I-80

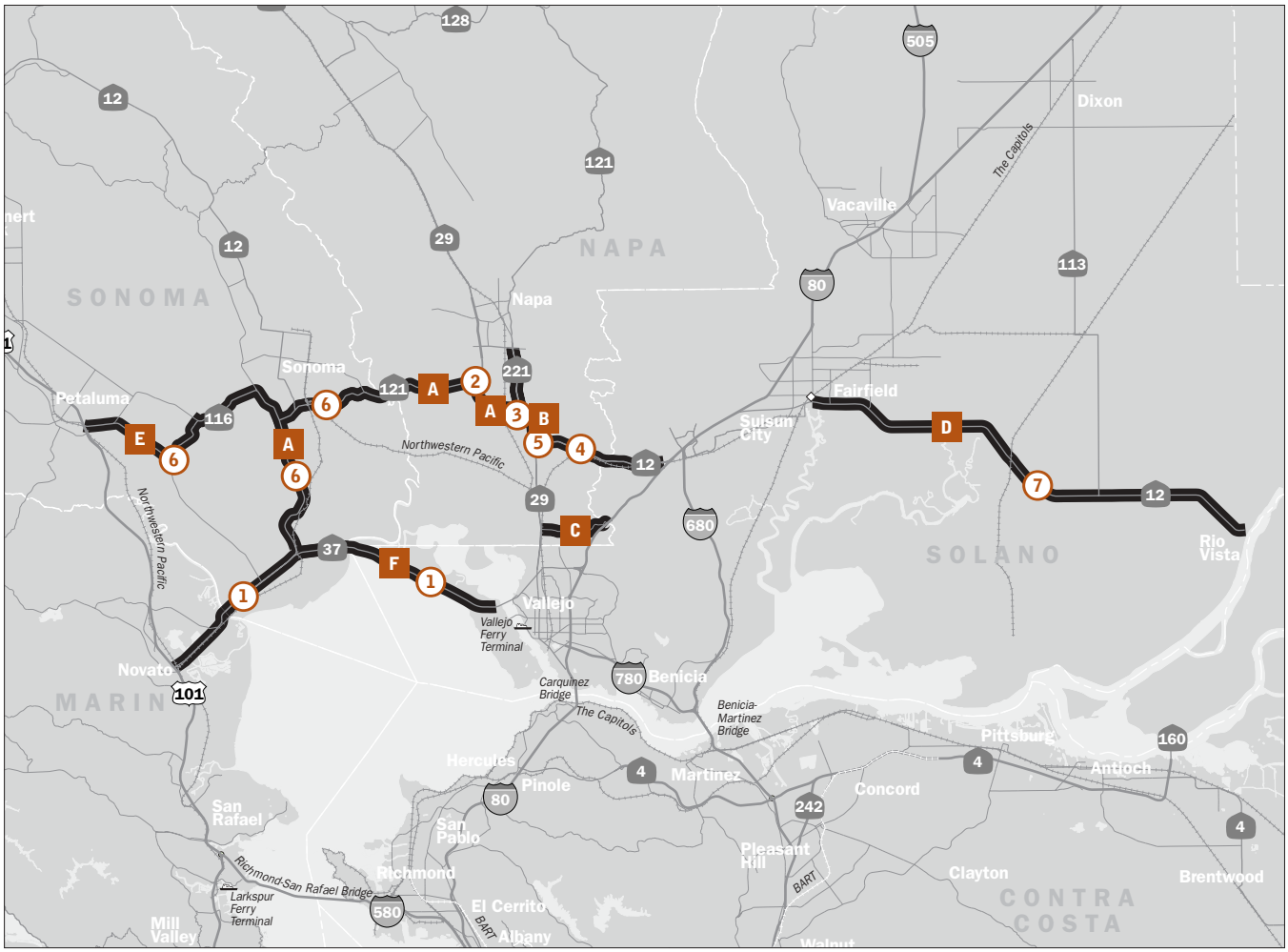
D Widen Route 12 to 4 lanes between Suisun City and Rio Vista; includes support for feasibility study of a new Rio Vista Bridge at Route 12 and Sacramento River

E Realign Route 116 (Stage Gulch Road) along Champlin Creek and widen the remaining segments

F Widen Route 37 to 4 lanes with environmental mitigation

Not mapped:

- Transit service between Napa/Sonoma/Solano counties



1 Track 1 Project

A Blueprint Project

980 Interstate Highway

101 U.S. Highway

1 State Highway

Freeway

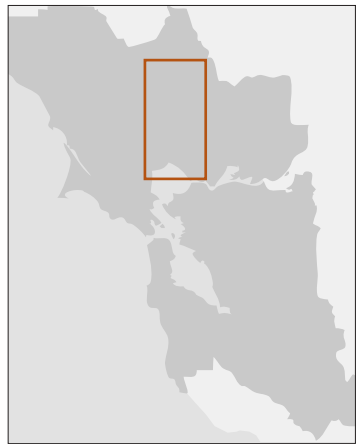
Other Highway

Major Arterial

Rail Line

Ferry Terminal

BART



NAPA VALLEY

Home to premier wineries and beautiful scenery, Napa Valley is a major tourist destination that is expected to continue to grow in popularity. Work trips also are expected to grow as the county adds about 30,000 more jobs (50 percent increase) and 24,000 employed residents (40 percent increase) over the next two decades. The Napa Valley subarea includes Route 29 from Calistoga to the city of Napa, and the Silverado Trail, both serving north-south traffic. Route 121 and Route 12 serve east-west traffic, connecting Napa County with Sonoma and Solano counties.

Public transit planning, funding and operations in the Napa Valley were recently consolidated under the auspices of the Napa County Transportation Planning Agency, thereby reducing the number of transit operators in the county from six to one. The VINE (Valley Intracity Neighborhood Express) continues to provide limited-stop bus service connections to Vallejo's BARTLink and ferry services.

Management Objectives

- Improve highway safety and operations for commute, commercial and tourist trips
- Improve transit service between Napa cities and central Bay Area employment centers
- Improve routes for truck traffic

Committed Funding

Not mapped:

- Route 29: Redwood/Trancas Road interchange construction
- Replace Napa River (Maxwell) Bridge and widen from 2 lanes to 4 lanes on Route 121 over the Napa River in the city of Napa
- Trancas Road intermodal facility in the city of Napa
- Transit Service Center in the city of Napa; operational improvements for existing transit programs
- Ancillary park-and-ride, intermodal facilities, transit access, express bus enhancements

Track 1

1. Widen First Street overcrossing on Route 29 from 2 lanes to 4 lanes in the city of Napa

Not mapped:

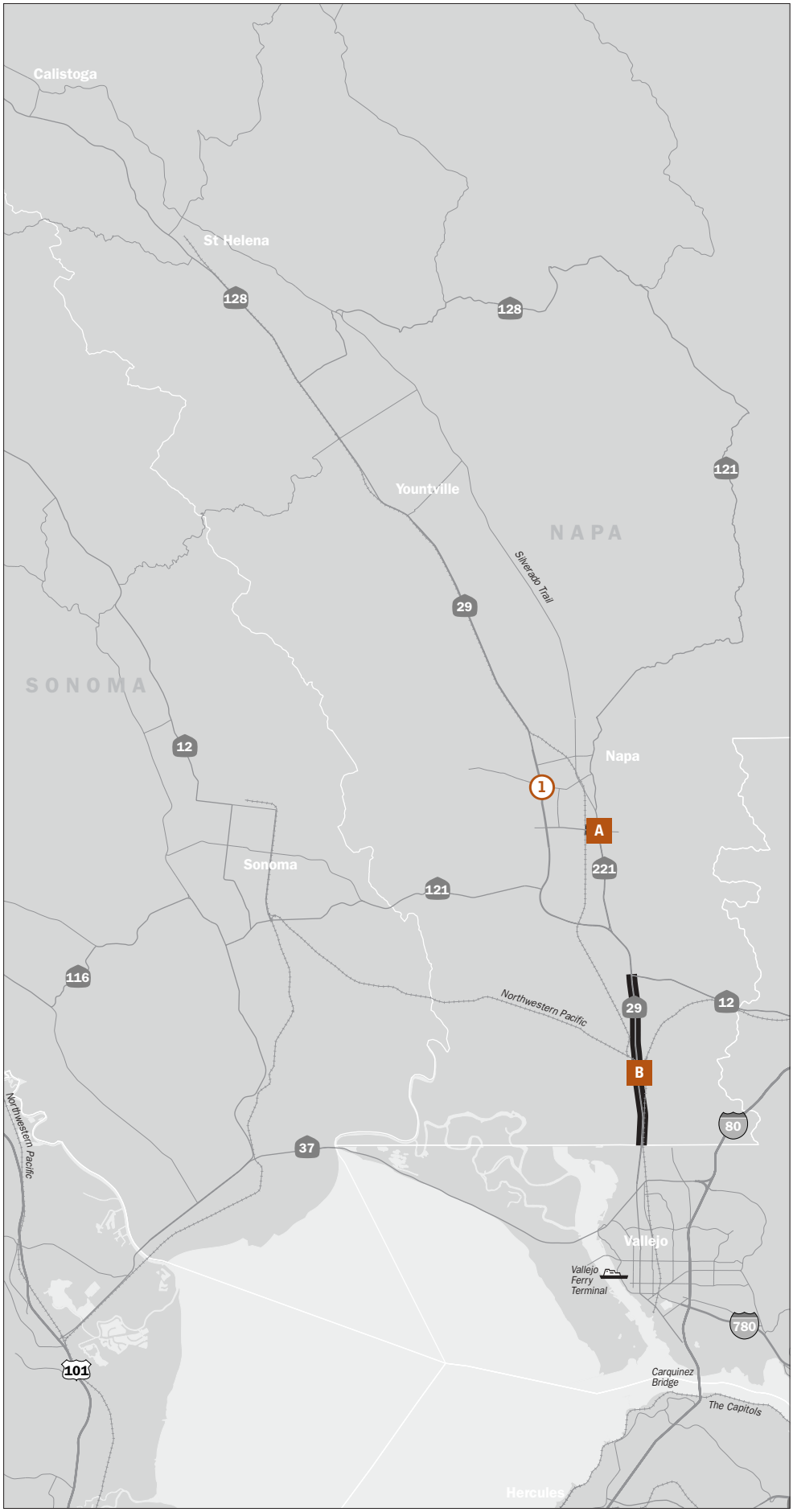
- Napa to Fairfield fixed-route transit (capital costs)
- Non-capacity increasing operational improvements to MTS and non-MTS streets and roads network in Napa Valley

Blueprint

A Widen Route 121 to 6 lanes from Magnolia Drive to Kansas Street

B Additional capacity in Route 29 corridor from Route 12 to Solano County

NAPA VALLEY



Track 1 Project

Blueprint Project

Interstate Highway

U.S. Highway

State Highway

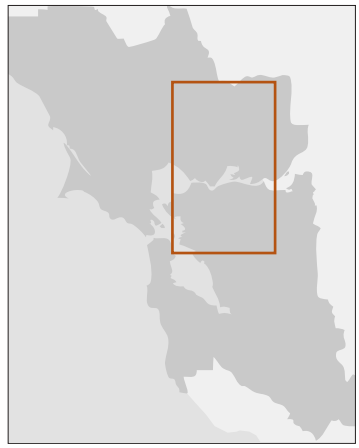
Freeway

Other Highway

Major Arterial

Rail Line

Ferry Terminal



EASTSHORE-NORTH

A major gateway to points east of the Bay Area, the corridor along Interstate 80 extends from the approaches at the Bay Bridge to Dixon in Solano County. It connects Alameda, Contra Costa and Solano counties. The Carquinez Bridge acts as a portal for trips into Contra Costa County from Solano County.

Major transit services and facilities include BART, express buses from Solano County to BART in El Cerrito, ferry services (including feeder bus services) from Vallejo to San Francisco, and local and express bus service operated by AC Transit and WestCAT. Capitol Corridor intercity rail services operate in the corridor between Oakland and Sacramento/Colfax. Major intermodal passenger facilities include the Richmond BART station (serving Amtrak and the Capitols), the Emeryville and Oakland Amtrak stations, the El Cerrito del Norte BART station (express buses) and the Vallejo Ferry Terminal. High-occupancy-vehicle lanes also are used extensively in the corridor.

The corridor varies from areas that are highly urbanized, such as from Richmond to the Bay Bridge, to low-density, suburban and rural development elsewhere in the corridor. It contains some of the fastest-growing residential areas in the region, with the majority of this growth occurring in Solano County. I-80 is a major recreational route, linking the Bay Area to Lake Tahoe and Reno, and is among the region's busiest trucking routes serving the Port of Oakland.

Management Objectives

- Rely on the Capitol Corridor trains, and express buses and carpools utilizing the HOV lanes to serve growth of long-distance commuting to the urban core
- Encourage ridesharing and transit use through bridge toll policies
- Rely on local transit and arterial improvements to serve growth in commuting between communities within urban core
- Use facility improvements to ensure that I-80 operates smoothly during midday hours to preserve freight mobility
- Manage Interstate 80 and local streets as one system to minimize overall delay and protect local streets from spillover traffic
- Design interchange improvements for I-80 in such a way as to protect mainline operations
- Develop an equitable ramp-metering plan
- Develop reliever route system in Solano County for local trips
- Develop pedestrian and bicycle access to bus, rail and ferry facilities

Committed Funding

Not mapped:

- New Carquinez Bridge: construct new suspension bridge west of existing bridges (4 westbound lanes, including an HOV lane, plus new bicycle/pedestrian pathway) and modify Crockett interchange
- Reconstruct MacArthur Boulevard onramp to restore access to eastbound I-80 and westbound I-580
- San Pablo Avenue Smart Corridor (Phase 2)
- Extend Mandela Parkway in Oakland; completes freeway congestion reliever route
- Widen I-80 from 5 lanes to 6 lanes to extend eastbound HOV lane from San Francisco-Oakland Bay Bridge toll plaza to Powell Street
- Extend Horton Street between 53rd Street and Haruff Street (under Powell Street Bridge in Emeryville)
- I-80 bicycle and pedestrian overcrossing in Berkeley
- Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)
- Transit centers and park-and-ride lots
- Regional Express Bus Program: I-80/Richmond Transbay
- Vallejo Baylink Ferry (capital cost for new passenger vessel)
- Regional Express Bus Program: Vallejo/Transbay
- Regional Express Bus Program: I-80/Solano County to Del Norte BART station
- Project development for new Fairfield/Vacaville multimodal rail station for Capitol Corridor intercity rail service in Solano County
- Install a second span along existing Green Valley Bridge to accomodate 4 lanes of travel way and an acceleration/deceleration lane in each direction

Track 1

1. Bus Rapid Transit in San Pablo Avenue Corridor
2. Intermodal transit improvements at the Emeryville Amtrak station (includes parking garage)
3. I-80/Ashby/Shellmound interchange modifications; involves the construction of 2 roundabouts and separate bike-pedestrian overcrossing
4. I-80/Gilman Avenue interchange improvements (includes roundabouts)
5. Richmond Parkway Transit Center (Phase 1); includes signal reconfiguration/timing, ingress/egress, parking facility, and security improvements at Hilltop park-and-ride lot
6. Hercules Transit Center relocation and expansion
7. Capitol Corridor train station in Hercules
8. Extend I-80 westbound HOV lane from north of Cummings Skyway to Route 4
9. AC Transit enhanced bus service in San Pablo Avenue corridor in Contra Costa County: new passenger stations, roadway geometric improvements, information kiosks
10. Richmond intermodal transfer station (BART to Amtrak/Capitol Corridor)
11. Vallejo intermodal ferry station (Phase 1)
12. Vallejo ferry maintenance facility
13. Widen I-80 from 6 lanes to 8 lanes between Vacaville and Dixon
14. Construct rail stations, track improvements, or intermodal centers for Capitol Corridor intercity rail or commuter rail service; potential station sites are Fairfield/Vacaville, Dixon and Benicia
15. Jepson Parkway (Phase 1); includes I-80/Leisure Town Road interchange improvements
16. I-80 HOV lanes between I-680 and I-505 through Fairfield and Vacaville

Not mapped:

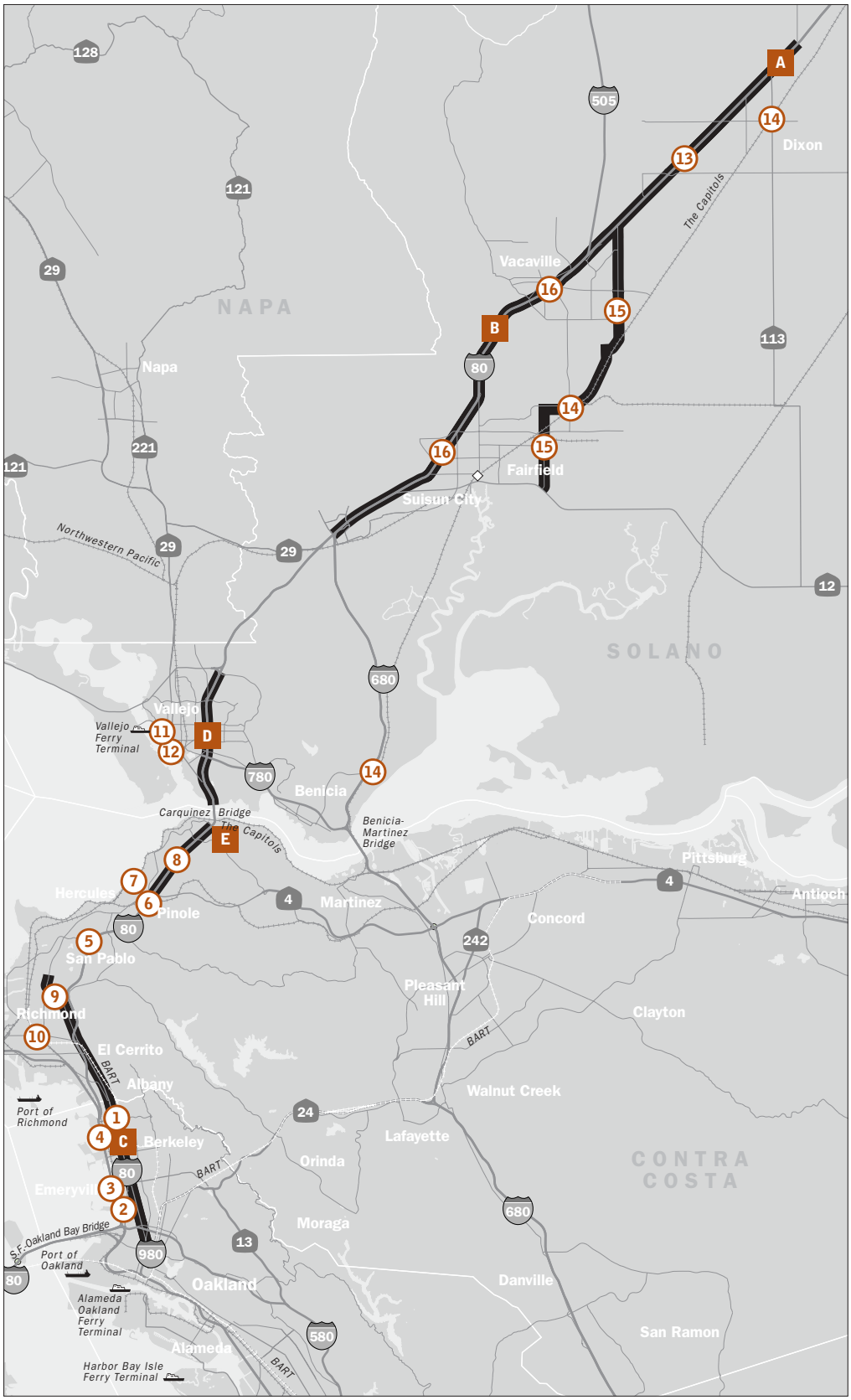
- New express buses for I-80 HOV service (capital costs)
- Non-capacity increasing improvements to interchanges and parallel arterials to I-80
- Express bus service on I-80 (capital costs for additional services beyond those in Regional Express Bus Program)
- I-80/I-680/Route 12 interchange improvements (Phase 2) (see "Diablo" Corridor for map)

Blueprint

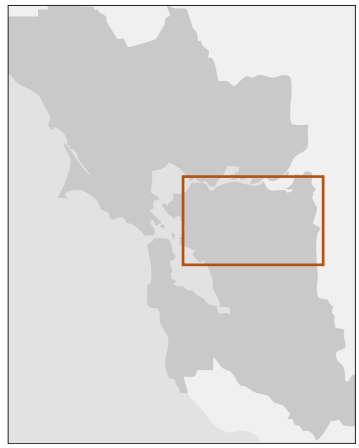
- **A** Complete widening of I-80 from 6 lanes to 8 lanes between I-505 in Vacaville and Pedrick Road in Dixon
- **B** Complete I-80 HOV lanes between I-680 in Fairfield and I-505 in Vacaville
- **C** Rapid Bus Transit on San Pablo Avenue (additional service)
- **D** Add new HOV lane in each direction on I-80 between Route 37 and Carquinez Bridge
- **E** I-80 eastbound HOV lanes from Route 4 to Carquinez Bridge

Not mapped:

- BART to Hilltop Mall in Richmond
- Various I-80 interchange improvements: Route 4, San Pablo Dam Road, Cummings Skyway, and others
- Capitol Corridor intercity rail improvements



Track 1 Project
Blueprint Project
Interstate Highway
U.S. Highway
State Highway
Freeway
Other Highway
Major Arterial
Rail Line
Ferry Terminal
Port
BART



DELTA

Characterized primarily by suburban residential development, this corridor along the Carquinez Strait and the Sacramento/San Joaquin Delta also has areas of open space and agricultural land interspersed with major industrial and oil refinery sites. Route 4, whose lane configuration varies throughout the corridor, is the spine of the corridor's transportation infrastructure. The segment of Route 4 from Interstate 80 to Cummings Skyway is being upgraded to an expressway. The portion between Cummings Skyway and Route 160 (Antioch Bridge) is a freeway, varying between four and eight lanes, that includes new HOV lanes between Railroad Avenue and Route 242. East of Route 160, Route 4 once again becomes a two-lane highway, portions of which will be realigned with the Route 4 Bypass project. Two-lane Walnut Boulevard/Vasco Road continues south from Route 4 in Brentwood to southern Alameda County.

Major transit services include the BART system to Pittsburg/Bay Point, and local and express bus service operated by WestCAT, County Connection and Tri Delta Transit. Amtrak operates the San Joaquins, which provide intercity passenger rail service on tracks parallel to Route 4 with stops in Antioch and Martinez. The eastern portion of the corridor includes areas that are projected to be among the fastest-growing residential areas in the region.

Management Objectives

- Improve operations and safety on western portion of Route 4
- Accommodate future travel growth in commute trips over Willow Pass by HOV lanes and transit
- Manage Route 4 and adjacent local streets as one system to minimize delay in the peak period
- Maintain reliable operations on Route 4 in off-peak hours for freight mobility
- Provide frequent feeder bus service to BART and enhance intercity transit service as appropriate
- Coordinate with San Joaquin County on long-range improvements for eastern portion of Route 4 outside Contra Costa County
- Develop pedestrian and bicycle access to transit and rail facilities

Antioch Bridge (Caltrans photo)

Committed Funding

Not mapped:

- Widen Route 4 to 6 mixed-flow lanes and 2 HOV lanes from Bailey Road to Railroad Avenue and restripe from Route 242 to Bailey Avenue for HOV lanes (under construction)
- Route 4 Bypass:
  - —Construct a 4-lane facility from Route 4 to Lone Tree Way and a 2-lane facility from Lone Tree Way to Walnut Boulevard, upgrade Marsh Creek Road and construct a partial freeway-to-freeway interchange one mile east of Hillcrest Avenue on Route 4 and partial interchange at Lone Tree Way
  - —Complete interchanges at Laurel and Lone Tree Way
  - —Widen to 4 lanes from Lone Tree Way to Balfour Road
- Widen Lone Tree Way to 6 lanes from Route 4 Bypass to Fairview Avenue in Brentwood
- Route 4/Railroad Avenue and Loveridge Road interchange improvements and highway widening from Railroad Avenue to Hillcrest Avenue (6 mixed-flow lanes and 2 HOV lanes between Railroad Avenue and Loveridge Road)
- Widen Route 4 to a 4-lane expressway from I-80 to Cummings Skyway (Phase 1)
- Widen Ygnacio Valley/Kirker Pass from 4 lanes to 6 lanes from Michigan Boulevard to Cowell Road
- Extend Laurel Road from Route 4 Bypass to Laurel Road East
- Widen Wilbur Avenue from 2 lanes to 4 lanes from Burlington Northern Santa Fe Railroad to Route 160
- Extend Panoramic Drive from North Concord BART station to Willow Pass Road
- Pittsburg/Bay Point BART station parking and lighting improvements (400 spaces)
- Regional Express Bus Program: Route 4/Brentwood to Pittsburg/Bay Point BART station
- Regional Express Bus Program: Route 4/Del Norte BART to Martinez intermodal station
- Route 4 transportation management system

Track 1

1. Vasco Road safety improvements
2. Widen eastbound Hillcrest Avenue offramp from 1 lane to 2 lanes and add a Route 4 eastbound auxiliary lane in Antioch
3. Upgrade Route 4 to full freeway from I-80 to Cummings Skyway (Phase 2)
4. Widen Route 4 from 4 lanes to 8 lanes from Loveridge to Somersville with HOV lanes
5. Route 4 Bypass, Segment 1: Route 160 freeway-to-freeway connectors to and from the north
6. Widen Route 4 from 4 lanes to 6 lanes from Somersville to Route 160 with reversible HOV in median (interim project)
7. BART/East Contra Costa Rail Extension (right-of-way aquisition)

Not mapped:

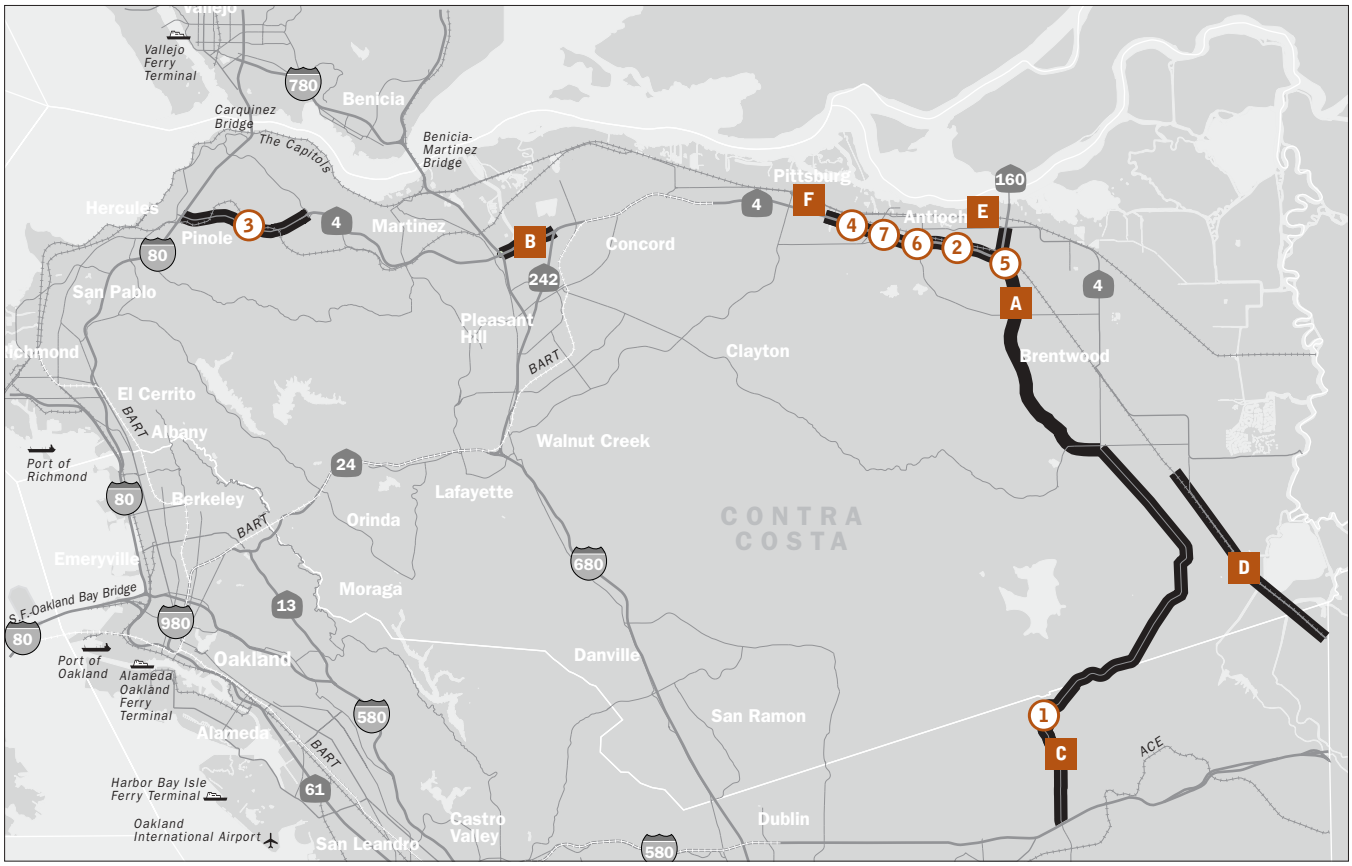
- Non-capacity increasing improvements to interchanges and parallel arterials to Route 4

Blueprint

- **A** Route 4 Brentwood Bypass improved to full 4-lane freeway from Route 160 to Walnut Boulevard south of Brentwood
- **B** Widen Route 4 to 6 lanes from I-680 to Route 242 with new I-680 interchange
- **C** Widen Vasco Road to 4 lanes from Route 4 Bypass to I-580 in Livermore
- **D** Tracy-Brentwood Expressway: expressway on new alignment around Byron
- **E** eBart on Route 4 using railroad tracks from Brentwood to North Concord
- **F** BART to Antioch (two-station extension)

Not mapped:

- Widen Route 4 to 8 lanes (includes two new HOV lanes) between Route 242 and I-680
- Various Route 4 interchange improvements: Hillcrest Avenue, Contra Loma and others
- Expanded Regional Express Bus Program: East Contra Costa County to BART and East Contra Costa to Tri-Valley express bus services



1 Track 1 Project

A Blueprint Project

980 Interstate Highway

101 U.S. Highway

1 State Highway

Freeway

Other Highway

Major Arterial

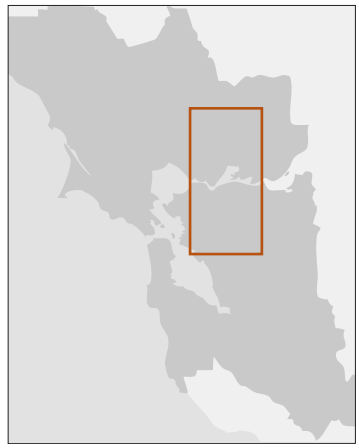
Rail Line

Airport

Ferry Terminal

Port

BART



DIABLO

This corridor follows the Interstate 680 freeway from Interstate 80 near Suisun City to Interstate 580 in Dublin, passing by mostly suburban development, interspersed with large office parks and retail shopping centers, and punctuated by the looming presence of Mt. Diablo. The corridor also includes the Benicia-Martinez Bridge, Route 242, Route 24, the I-680/24 interchange and the Caldecott Tunnel. I-680 provides HOV lanes between the I-680/24 interchange and I-580.

BART serves the northern portion of the corridor and connects Contra Costa County to Alameda County, San Francisco and the Peninsula to the west. County Connection provides extensive feeder bus service to BART and local service throughout the corridor. Major transit intermodal facilities are the Walnut Creek and North Concord BART stations, and the Martinez intermodal station for the Capitol Corridor intercity rail service.

The corridor serves commuter travel from residential areas in Solano County into Contra Costa County. The southern end connects to the rapidly growing Tri-Valley area. Residents of the corridor typically commute to jobs in the Tri-Valley and through the Caldecott Tunnel to jobs in Alameda and San Francisco counties.

Management Objectives

- Use toll policies and preferential lanes to encourage HOV lane use and peak spreading for trips within the corridor and those entering corridor from the north
- Manage I-680 and Route 242 as one system to minimize overall system delay during the peak period and to ensure acceptable I-680/24 interchange operations
- Ensure improvements to Route 4 and Route 242 do not adversely affect I-680 operations
- Maintain reliable freeway operations in off-peak period for freight mobility
- Reduce delays and unpredictable travel time by making Route 24 a continuous four-lane facility in each direction
- Provide good bus, bicycle and pedestrian connections to major activity centers and BART

Committed Funding

Not mapped:

- New Benicia-Martinez Bridge: construct new bridge span east of existing span (4 mixed-flow lanes, 1 slow-vehicle lane and bicycle/pedestrian path); includes new toll plaza and upgrades to I-680/I-780 interchange and I-680/Marina Vista Road interchange
- I-80/I-680/Route 12 interchange improvements; includes connectors and auxiliary lanes between Green Valley Road to Cordelia truck weigh station (Phase 1)
- Widen and extend Bollinger Canyon Road (6 lanes) from Alcosta Boulevard to Dougherty Road
- I-680/Alcosta Boulevard interchange improvements
- Widen Dougherty Road to 6 lanes from Red Willow to Contra Costa County line
- Construct Windermere Parkway: 4 lanes from Bollinger extension to East Branch
- Construct East Branch; 4 lanes from Bollinger Canyon Road extension to Camino Tassajara
- Gateway Lamorinda traffic program
- Martinez Intermodal Terminal Facility (Phases 1 and 2); includes construction of a new passenger rail station, bus facilities and parking
- Regional Express Bus Program: I-680 and I-780/Solano County to Walnut Creek BART station
- Regional Express Bus Program: I-680/Martinez to San Ramon
- Regional Express Bus Program: I-80 and I-680/Solano County to Walnut Creek BART station

Track 1

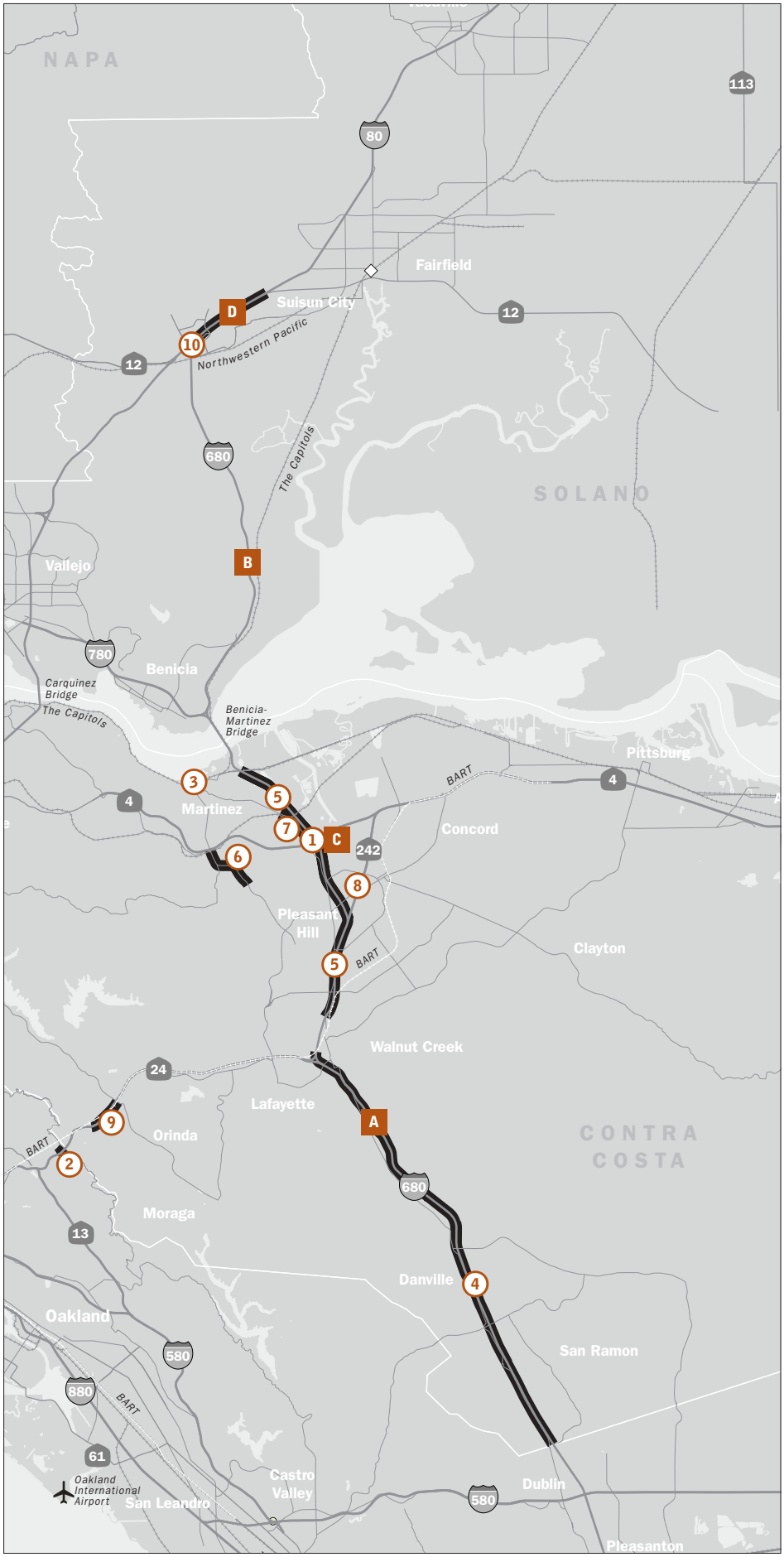
1. I-680/Route 4 interchange freeway-to-freeway direct connectors (Phases 1 and 2): eastbound Route 4 to southbound I-680, and northbound I-680 to westbound Route 4
2. Caldecott Tunnel fourth bore
3. Martinez Intermodal Terminal Facility (Phase 3 initial segment): 200 interim parking spaces (includes site acquisition, demolition, and construction)
4. I-680 auxiliary lane from Bollinger Canyon Road to Diablo Road in San Ramon and Danville
5. I-680 HOV lanes from Marina Vista interchange to North Main Street (southbound) and from Route 242 northbound to the Marina Vista interchange
6. Widen Alhambra Avenue from Route 4 to McAlvey Drive (Phases 2 and 3)
7. Widen Pacheco Boulevard from 2 lanes to 4 lanes from Blum Road to Arthur Road
8. Extend Commerce Avenue to Willow Pass Road
9. Route 24 eastbound auxiliary lanes from Gateway Boulevard to Brookwood Road/Moraga Way in Orinda
10. I-80/I-680/Route 12 interchange improvements (Phase 2)

Not mapped:

- Non-capacity increasing improvements to interchanges and parallel arterials to I-680 and Route 24
- Additional express bus service on I-680 (capital costs)

Blueprint

- **A** Selected additional I-680 auxiliary lanes south of I-680/Route 24 interchange
- **B** Widen I-680 to 6 lanes (all mixed flow) north of Benicia Bridge
- **C** Increase I-680/Route 4 interchange capacity and HOV-to-HOV connectors between Route 4 and I-680 (westbound Route 4 to southbound I-680)
- **D** I-80/I-680/Route 12 interchange (Phase 3): widen I-80 by 2 lanes in each direction (1 mixed flow and 1 HOV lane) between I-680 and Route 12 (west)



Track 1 Project

Blueprint Project

Interstate Highway

U.S. Highway

State Highway

Freeway

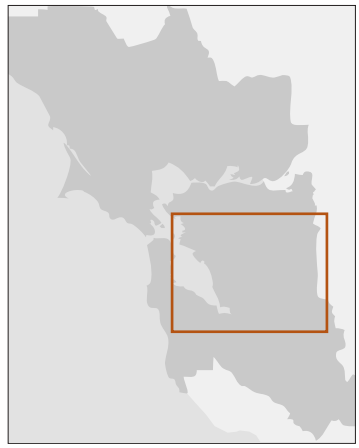
Other Highway

Major Arterial

Rail Line

Airport

BART



TRI-VALLEY

The windy ridges of Altamont Pass form the eastern border of the Tri-Valley travel corridor. The corridor's transportation spine is Interstate 580, which connects the Central Valley to the Bay Area. It extends from the Alameda/San Joaquin County line in the east through the bustling Tri-Valley area (Dublin, Pleasanton, Livermore) to Interstate 238 in Hayward.

Other components of the transportation system include an extensive network of suburban arterials in the Tri-Valley area, local bus service provided by the Livermore/Amador Valley Transit Authority in the east and AC Transit in the west, and long-distance subscription bus service (Stockton/Tri-Valley/San Jose) operated by the San Joaquin Regional Transit District. The Dublin/Pleasanton BART station (pictured) is an active intermodal facility for express buses and commuters using BART to get to Tri-Valley jobs as well as for area residents using BART to get to jobs in the East Bay and San Francisco. The Altamont Commuter Express rail service offers long-distance commuters an alternative to driving between Stockton and San Jose.

The area has predominantly suburban-scale development with large office parks located in the central sections of the corridor. Areas of open space and agricultural land dominate the eastern portion of the corridor. Several local jurisdictions have adopted gateway policies designed to conserve capacity on I-580 and manage congestion without adversely affecting traffic leading into and out of the corridor.

I-580 has heavy commuter traffic during the week. On weekends it carries a large number of automobiles and recreational vehicles between the Bay Area and the Sierra Nevada. The corridor is a major truck route from distribution centers in the Central Valley to the Bay Area.

Management Objectives

- Manage interchange spacing and capacity of new routes connecting to Interstate 580 to prevent traffic overload
- Improve arterials near I-580 to provide travel alternatives for short trips during commute period
- Use ramp metering for I-580 to balance access for through and local trips
- Manage freeway and local streets as one system to minimize overall system delays in peak period
- Maintain reliable freeway operation in off-peak hours for freight mobility
- Recognize the Altamont Pass as a gateway and develop strategies to manage commute, freight and recreational travel
- Maximize transit/carpool travel time savings in corridor
- Increase local bus feeder services to BART and improve intercounty rail express bus service
- Preserve railroad rights of way for future transportation uses
- Develop pedestrian and bicycle access to transit facilities, and connect transit to nearby mixed-use development

Committed Funding

Not mapped:

- Widen Route 238 from 4 lanes to 6 lanes between I-580 and I-880; includes auxiliary lanes on I-880 south of Route 238
- Widen Isabel Avenue to four lanes (along future Route 84 alignment) from I-580 south to Vallecitos Road and improvements along Route 84 through Pigeon Pass
- Isabel Avenue/Route 84/I-580 interchange improvements: build second bridge to provide 6 lanes over I-580 (Phase 2)
- I-580 auxiliary lane between Santa Rita Road and Airway Boulevard
- Vasco Road/I-580 interchange improvements
- I-580 interchange improvements at Castro Valley Road, Redwood Road, and Center Street in Castro Valley
- Extend North Canyons Parkway westerly to Dublin Boulevard
- I-580/North Livermore Avenue interchange improvements
- Livermore Valley Center Parking Structure
- I-580/First Street interchange improvements
- I-580/Greenville Road interchange improvements
- I-580/San Ramon Road/Foothill Road interchange improvements
- I-580/Fallon Road/El Charro Road interchange improvements
- Extend Las Positas Road between First Street and Vasco Road
- Extend Scarlett Drive from Dublin Boulevard to Dougherty Road
- I-580/I-680 Transportation Operations System (TOS)
- Altamont Commuter Express rail service operating and station/track improvements (4 round trips daily)
- Rehabilitate and widen Route 84 from I-580 to Scott Street

Track 1

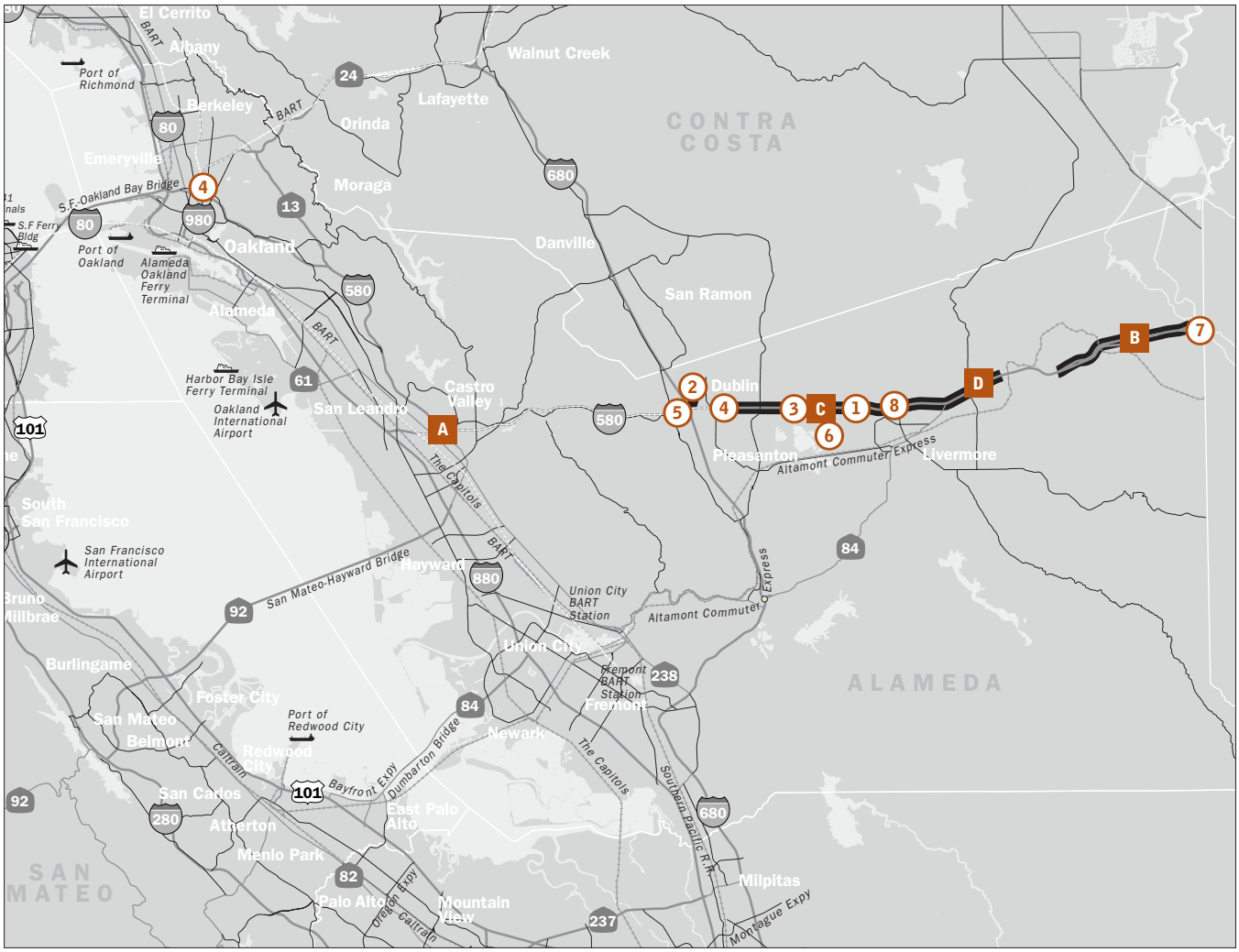
1. Isabel Avenue/Route 84/I-580 interchange improvements (Phase 1)
2. Widen Dublin Boulevard from 4 lanes to 6 lanes from Village Parkway to Sierra Court
3. Widen I-580 to add an HOV lane in each direction from west of Tassajara Road in Pleasanton to east of Vasco Road in Livermore (initial segment)
4. Dublin/Pleasanton BART station transit village; includes construction of parking structure
5. New West Dublin/Pleasanton BART station
6. LAVTA satellite maintenance/operations facility
7. Auto/truck separation lane at I-580/I-205 interchange
8. BART/Tri-Valley Rail Extension (for right-of-way aquisition)

Blueprint

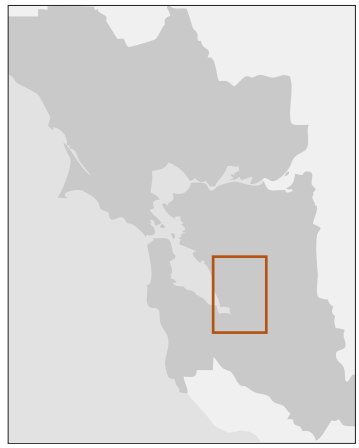
- **A** I-238/I-580 truck bypass lane
- **B** Westbound truck climbing lane over Altamont Pass
- **C** I-580 HOV lanes extended east beyond Vasco Road
- **D** BART to Livermore, tBART, express bus (mode subject to ongoing study)

Not mapped:

- Intra-Tri-Valley express bus services
- San Joaquin County to Tri-Valley and Dublin/Pleasanton BART express bus services



- 1 Track 1 Project
- A Blueprint Project
- 980 Interstate Highway
- 101 U.S. Highway
- 1 State Highway
- Freeway
- Other Highway
- Major Arterial
- Rail Line
- Airport
- Ferry Terminal
- Port
- BART



SUNOL GATEWAY

This corridor is a transportation pipeline for commuters traveling from Contra Costa County, the Tri-Valley and distant San Joaquin County to jobs in Silicon Valley. It follows the Interstate 680 freeway south from Interstate 580 in the Tri-Valley area over the Sunol Grade to San Jose. Major transportation facilities include the I-680 freeway, the I-580/I-680 interchange, and Route 84 between Sunol and I-580 in Livermore.

There is limited, though growing, transit service, primarily subscription buses from the Tri-Valley and San Joaquin County to Santa Clara County. Commuter rail service from Stockton over I-680 south to San Jose was initiated in 1998 by the Altamont Commuter Express (ACE), and now provides four commute-period trains.

The corridor is bracketed by the expanding Tri-Valley residential and business complex to the north and the booming job centers in Santa Clara County to the south. Recent explosive growth in commute traffic has elevated this corridor to the Bay Area's second most congested for the westbound morning commute.

Management Objectives

- Manage Sunol Grade by emphasizing travel time savings for carpool/transit commute trips
- Develop effective transit alternatives between Tri-Valley and Santa Clara County employment centers; ensure new transit services connect with Santa Clara County transit system
- Provide effective connections between Interstate 880 and Interstate 680 in Santa Clara County to balance traffic demand
- Develop coordinated strategy for improvements to Route 84 and Interstate 580/I-680 to serve growth in commuting between Tri-Valley and Santa Clara County
- Develop equitable ramp-metering plans in the Tri-Valley for local and through trips in the peak period on I-580 and I-680
- Maintain reliable off-peak freeway operations for freight mobility
- Preserve railroad rights of way for transit

SUNOL GATEWAY

Committed Funding

Not mapped:

- I-680 Sunol Grade southbound and northbound HOV lanes, ramp metering and auxiliary lane from Route 84 to Route 237 (possible value pricing)
- I-680/Sunol Boulevard ramp improvements; includes signal improvements and widening under existing structure
- I-580/I-680 interchange: construct connector southbound I-680 to eastbound I-580, including new local ramps (under construction)
- I-680/Stoneridge Drive interchange improvements
- I-680/Bernal Avenue interchange improvements
- I-680/West Las Positas crossing improvements
- Regional Express Bus Program: I-680 to Pleasant Hill BART station
- Regional Express Bus Program: Tri-Valley to Cupertino
- Iron Horse bicycle, pedestrian and transit route
- I-680/I-880 cross connector (study only)
- ACE train station and track improvements in Alameda County, including parking improvements at downtown Livermore station and Vasco Road station.

Track 1

1. Crow Canyon safety improvements
2. ACE station/track improvements in Alameda County

Blueprint

A Widen Route 84 from 4 lanes to 6 lanes between Livermore and Sunol

B I-680 to I-880 cross connector (Mission Boulevard or other alignment, to be determined)

C Direct HOV-to-HOV connectors between Route 84 HOV lanes and I-680 HOV lanes

Not mapped:

- ACE service expansion
- Tri-Valley to Silicon Valley express bus services

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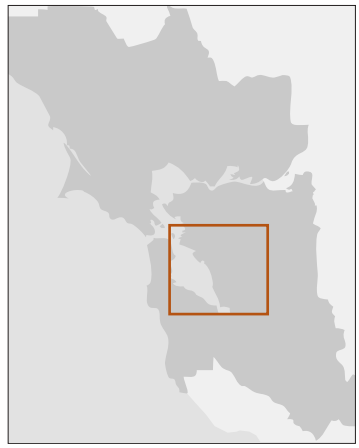
- Track 1 Project
- Blueprint Project
- Interstate Highway
- U.S. Highway
- State Highway
- Freeway
- Other Highway
- Major Arterial
- Rail Line
- BART



EASTSHORE-SOUTH

Bounded by the East Bay hills and San Francisco Bay, this corridor extends from downtown Oakland south to the Alameda/Santa Clara County line. Interstate 880 is the corridor's freeway spine and carries large volumes of traffic, both auto and truck, and experiences significant peak-period congestion.

The corridor's transportation system is an intricate mix of transportation modes: freeways (I-880, Interstate 580, Interstate 980, Route 238, Route 92, Route 24 and Route 84), bus and rail transit (AC Transit, Union City Transit and BART), intercity passenger rail service (the Capitols), major arterials, the Port of Oakland and Oakland International Airport. Expansion of the airport terminals and ground access capabilities is planned for the near future. Carpool lanes on I-880 currently extend from Route 238 to Mission Boulevard, with funding committed to extend them south to Route 237 in Santa Clara County.

Major intermodal passenger facilities are BART stations with significant AC Transit connecting bus activity (e.g., 12th Street, MacArthur, Hayward stations, etc.), Capitol Corridor intercity rail stations (Jack London), ferry terminals (Jack London and Alameda), and Oakland International Airport. Eastshore-South is the region's main freight corridor.

The northern end of the corridor provides access to major urban centers, including Oakland. Overall, the corridor is a mix of older urban and industrial areas, and newer infill development.

Management Objectives

- Manage freeway operations to maximize travel time savings for HOV lane users
- Manage traffic on Interstate 880 and local streets as one system to minimize overall system delay in the peak period
- Maintain reliable freeway operations in off-peak hours for freight mobility; use weigh-in-motion technology to expedite trucks
- Maximize use of BART and AC Transit for longer-distance commute trips in corridor by providing competitive travel times and convenient transfers
- Ensure good transit connections to major activity centers in corridor (e.g., universities, sports complexes, hospitals, retail centers, Oakland Airport)
- Rely on local transit to serve growth in commuting between communities in urban core
- Improve local streets for efficient bus operations
- Improve access to support redevelopment of Alameda Naval Air Station

MTC photo archives

Committed Funding

Not mapped:

- Route 238 (Hayward Bypass) 4-lane expressway: I-580 to Harder (Stage 1 only)
- Route 84 upgrade to expressway between Route 238 and I-880 in Fremont
- I-580 connections to Hayward Bypass (Route 238) and interchange improvements: northbound Hayward Bypass to northbound I-580 and northbound Hayward Bypass to westbound I-238
- Washington Avenue/Beatrice Street interchange improvements
- New arterial along eastern edge of Westgate Shopping Center between Davis Street and Williams Street
- Mission Boulevard safety and operational improvements from Industrial Parkway to Route 84
- Oakland Airport: construct 4-lane cross-airport roadway (mostly on Port of Oakland property)
- Seismic retrofit of Webster and Posey tunnels between the cities of Alameda and Oakland; Stage 1: seismic retrofit inside tunnels (under construction); Stage 2: seismic retrofit outside tunnels to strengthen surrounding soils
- Hesperian Boulevard/Lewelling Boulevard channelization improvements
- Local street improvements in Newark
- Local street improvements in Oakland
- Downtown Oakland streetscape improvements (Broadway, 14th Street and Telegraph Avenue)
- Regional Express Bus Program: I-880/Hayward BART station to Silicon Valley
- East 14th Street/Hesperian Boulevard/150th Street channelization improvements
- Capitol Corridor intercity rail service (nine round trips daily between Oakland and Sacramento and seven round trips daily between San Jose and Oakland)
- Port of Oakland Joint Intermodal Terminal
- Fruitvale BART station transit village
- Widen East Lewelling Boulevard in San Leandro
- Industrial Parkway upgrade between Whipple Road and improved segment of the parkway in Hayward

Track 1

1. Extend Tinker Avenue from Main Street to Webster Street/Constitution Way and construct College of Alameda Transit Center
2. Construct Central Avenue 4-lane overpass at Union Pacific Railroad (environmental and design phases only)
3. 42nd Avenue/High Street access improvements to I-880 in Oakland; includes widening and realignment of local streets, connector roads, and ramps near interchange
4. Route 260 to I-880 connection improvements between Alameda and Oakland
5. Capitol Corridor mitigation for track work at Jack London Square
6. Realign Langley Street (access point for Oakland International Airport North Field); includes reconstruction of Route 61 (Doolittle Drive) and new traffic signal at Route 61/Langley Street
7. Widen Marina Boulevard from Alvarado Boulevard to San Leandro Boulevard
8. Widen Thornton Avenue from 2 lanes to 4 lanes between Gateway Boulevard and Hickory Street
9. Widen and reconstruct Route 262/ Warren Avenue/I-880 interchange and East Warren Avenue/UPRR grade separation
10. Widen Union City Boulevard from 4 lanes to 6 lanes from Paseo Padre in Fremont to Industrial Parkway in Hayward
11. BART/Oakland International Airport connector
12. San Leandro BART station transit village (Phase 1); includes parking structure, kiss-and-ride, and bus improvements
13. Westbound I-580 to new Route 238 (Hayward Bypass) connection
14. Route 238 (Hayward Bypass): 4-lane expressway from Harder to Industrial Parkway (Stages 2 and 3)
15. I-880/Broadway-Jackson Street interchange improvements (Phase 1)
16. Joint Intermodal Terminal/Port of Oakland access improvements (Phase 1)
17. MacArthur BART station intermodal transit village (includes replacement parking)

Not mapped:

- Bus Rapid Transit in Oakland/Berkeley/San Leandro corridor, Phase 1
- Capitol Corridor Phase 1 expansion (for 16 daily round trips)

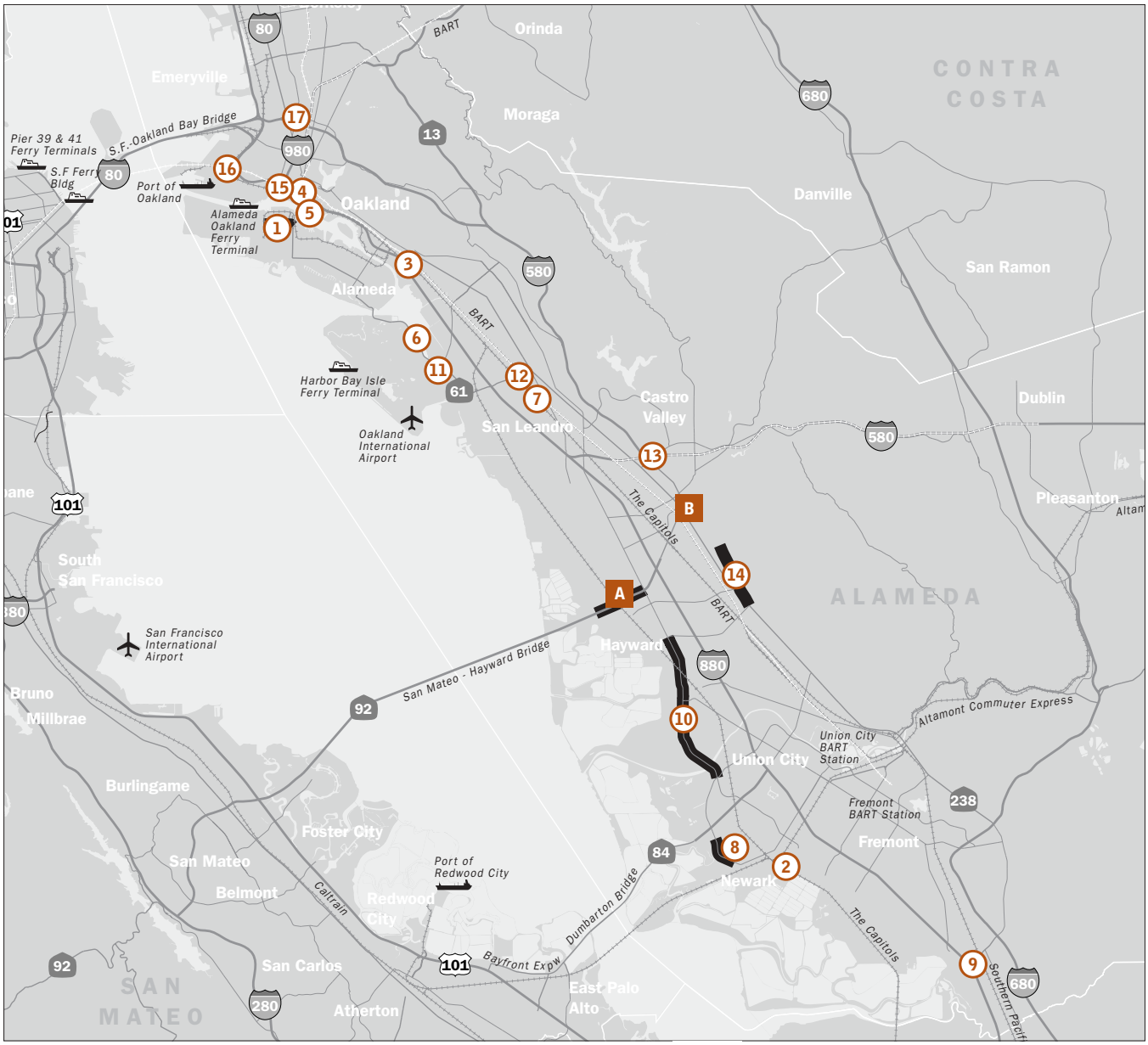
Blueprint

A. New combined Clawiter/Whitesell/Route 92 interchange and extension of Whitesell to provide connections to Hesperian Boulevard

B. Mission/Foothill/Jackson grade separation

Not mapped:

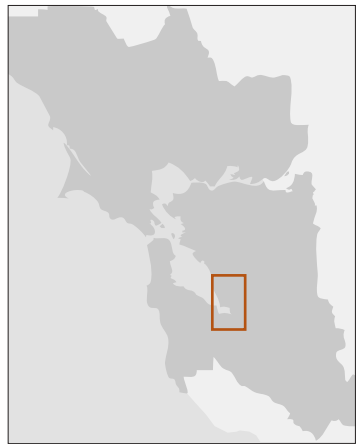
- Various I-880 interchange improvements: Winton Avenue, A Street and others
- Southern Alameda County to Silicon Valley express bus services
- Bus Rapid Transit in Oakland/Berkeley/San Leandro corridor, Phase 2



Base map © Thomas Bros. Maps. All rights reserved.

- 1 Track 1 Project
- A Blueprint Project
- 980 Interstate Highway
- 101 U.S. Highway
- 1 State Highway
- Freeway
- Other Highway
- Major Arterial
- Rail Line
- Airport
- Ferry Terminal
- Port
- BART


180 EXPRESS
BART
9812
VTA



FREMONT-SOUTH BAY

This corridor connects southern Alameda County with downtown San Jose and the Golden Triangle portion of Silicon Valley. Major highway transportation facilities are the Interstate 880, Interstate 680 and Route 237 freeways. I-880 currently experiences extensive weekday congestion leading into Santa Clara County.

Transit facilities include the Santa Clara Valley Transportation Authority (VTA) light-rail stations connecting with downtown San Jose; Capitol Corridor intercity rail service to Sacramento; Altamont Commuter Express rail service from the Central Valley; and VTA connecting bus service between the Fremont BART station (pictured), downtown San Jose and Silicon Valley. The Fremont BART station is the major intermodal transit facility for BART and VTA buses. The area is characterized by low-density housing and large campus-like employment centers that developed as Silicon Valley expanded to the east.

In 2000, Alameda and Santa Clara counties renewed local transportation sales tax measures that provide significant new funding for a planned BART extension from Fremont through Milpitas and downtown San Jose to Santa Clara. In addition, the BART and VTA governing boards recently adopted a comprehensive agreement to bring BART into Santa Clara County.

Extension of VTA's light-rail system from Santa Clara to Mountain View opened for service in 1999; the eastern leg of the extension to Milpitas will be completed in 2004. Capitol Corridor intercity train service to Sacramento uses the Alviso line, but there is no direct connection to the BART system (the Union City BART station is one possible connection point being studied).

Management Objectives

- Manage freeway and local street operations to ensure competitive travel times for HOV lane/express bus users during peak period
- Provide convenient connections between transit systems in corridor (BART, Santa Clara VTA, AC Transit, Capitol Corridor, Altamont Commuter Express)
- Maintain reliable freeway operations on Interstate 880 in off-peak period for freight mobility

VTA photo

Committed Funding

Not mapped:

- Reconstruct I-880/Route 262 interchange and widen I-880 from Route 262 (Mission Boulevard) to the Santa Clara County line from 8 lanes to 10 lanes (8 mixed-flow and 2 HOV lanes)
- Reconstruct I-880/Dixon Landing Road interchange and widen I-880 from 8 lanes to 10 lanes (includes 2 HOV lanes) from Route 237 to the Alameda County line
- Route 84/Ardenwood Boulevard westbound offramp intersection improvements
- Widen I-880 from 4 lanes to 6 lanes from Montague Expressway to U.S. 101
- I-880/Route 237 interchange improvements: freeway-to-freeway HOV connector and eastbound Route 237 to southbound I-880 braided ramp to Tasman; southbound I-880 to westbound Route 237 and eastbound Route 237 to northbound I-880 (Stages A&B)
- Widen Stevenson Boulevard from 4 lanes to 6 lanes from I-880 to Blacow Road
- Widen Stevenson Boulevard from 2 lanes to 4 lanes between Gallaudet Drive and Mission Boulevard
- Extend Fremont Boulevard to connect to I-880/Dixon Landing Road
- Extend Cushing Parkway between Automall Parkway/Boyce Road and Cushing Parkway/Fremont Boulevard/I-880
- Widen Mowry Avenue from Mission Boulevard to Peralta Boulevard
- Widen Kato Road from Warren Avenue to Milmont Drive
- Paseo Padre Parkway/Peralta Boulevard (Route 84) intersection improvements
- Warren Avenue/Warm Springs Boulevard intersection improvements
- Regional Express Bus Program: I-680/Fremont BART station to Silicon Valley
- Route 84 vertical and horizontal alignment improvements in Fremont and San Leandro (3 miles to 5.1 miles east of I-680)

Track 1

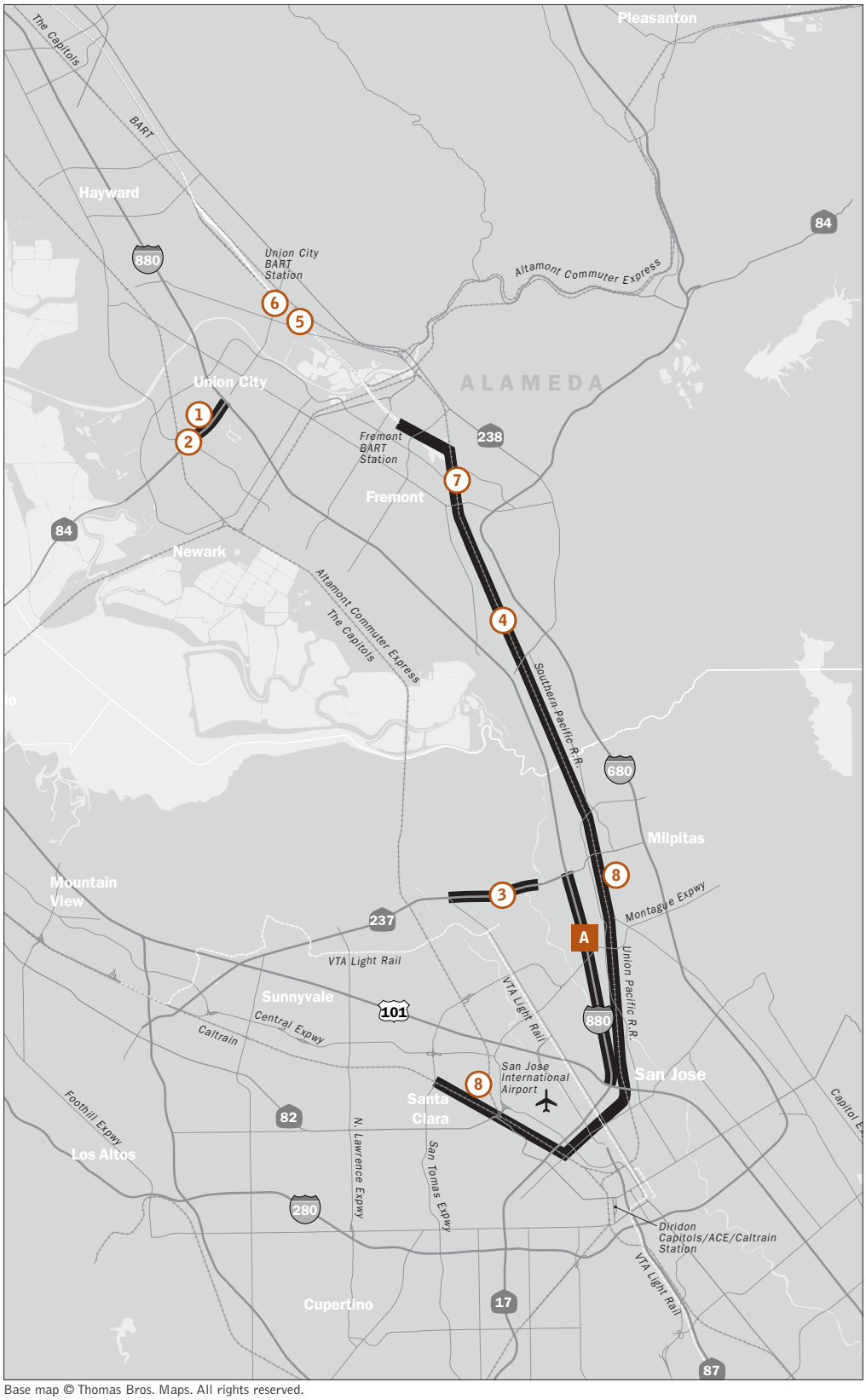
1. Route 84 southbound HOV extension from Newark Boulevard to I-880
2. Route 84 southbound HOV onramp from Newark Boulevard to existing Route 84 southbound HOV lane
3. Route 237 westbound auxiliary lanes between Coyote Creek Bridge and North First Street
4. BART extension to Warm Springs
5. Union City Intermodal Station access improvements (Phase 1); includes extending 11th Street and constructing at-grade parking and pedestrian grade separation
6. Union City Intermodal Station (Phase 2); includes 19 bus-bays and a kiss-and-ride loop road
7. Rail grade separations at Washington Boulevard/Paseo Padre Parkway at Union Pacific Railroad in Fremont
8. BART Extension from Warm Springs to San Jose

Blueprint

A. Widen I-880 to 8 lanes from Route 237 to U.S. 101 with 2 new lanes as HOV

Not mapped:

- ACE service expansion



1 Track 1 Project

A Blueprint Project

980 Interstate Highway

101 U.S. Highway

1 State Highway

Freeway

Other Highway

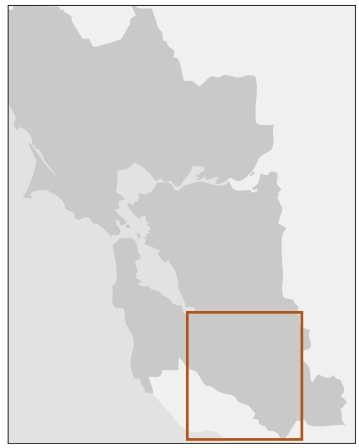
Major Arterial

Rail Line

Airport

BART


San Carlos St
Auzerais Ave
82
801
VTA



SILICON VALLEY

Silicon Valley's potent economy is influencing land-use and transportation decisions around much of the Bay Area and beyond. Many transportation investments in this corridor are tied to the internal circulation needs of this heavily populated and job-rich portion of the Bay Area. The subarea encompasses the central and southern portions of Santa Clara County. The major highway transportation facilities are Interstate 280, Interstate 680, U.S. 101, Route 9, Route 17, Route 85 and Route 87 freeways. The corridor is linked internally by a system of county expressways and a number of major arterials. Santa Clara County is investing heavily in transit to improve mobility and better link dispersed housing and office/industrial complexes.

Public transportation facilities include light rail; Capitol Corridor intercity rail service to Sacramento; Caltrain commuter rail service between Gilroy in the southern end of the county all the way to San Francisco; and light rail and local and express bus service operated by Santa Clara Valley Transportation Authority (VTA). VTA's recent sales tax measure contributes heavily to the light-rail system, which is becoming the "backbone" of the mass transit system. The measure also provides funds to bring BART into Santa Clara County, through downtown San Jose to Santa Clara (see Fremont-South Bay Corridor). Major passenger intermodal terminals are the Diridon Caltrain station, the Tamien and Mountain View light-rail/Caltrain stations, the Palo Alto Caltrain station, and San Jose International Airport.

This subarea accounts for the largest share of Bay Area employment, and draws workers from surrounding areas, including San Benito, San Joaquin and Santa Cruz counties.

Management Objectives

- Manage travel in "gateways" leading into Santa Clara Valley — U.S. 101, Route 17, Interstate 880, Interstate 680 and Interstate 280 — to protect the core valley employment centers from traffic overload
- Complete gaps in the existing HOV lane system to facilitate express bus service
- Manage freeways, expressways and local arterials within Santa Clara County as one system to minimize overall system delay during the peak period
- Maintain reliable freeway operations in the off-peak period for freight mobility
- Improve arterials within the core valley employment centers to better serve transit, autos and truck deliveries
- Provide feeder service to rail systems and expand rail systems in corridors that link jobs and transit-dependent workers
- Ensure good transit access to major activity centers and San Jose International Airport
- Improve freeway connectivity
- Close gaps in county bicycle network and provide safe and convenient bicycle and pedestrian access to transit facilities

VTA photo

Committed Funding

Not mapped:

- Tasman Corridor East light-rail extension from North First Street to Hostetter Road
- Downtown East Valley: light-rail and Bus Rapid Transit Phases 1 and 2
- Capitol Corridor light-rail extension along Capitol Avenue from Hostetter Road to Wilbur Avenue north of Capitol Expressway
- San Jose International Airport connections to Guadalupe light-rail transit
- Vasona Corridor light-rail extension from downtown San Jose to Winchester Boulevard in Campbell
- Widen U.S. 101 from 4 lanes to 6 lanes between Metcalf Road in south San Jose to Cochrane Road in Morgan Hill
- Widen Guadalupe Expressway (Route 87) from 4-lane expressway to 6-lane freeway, including 2 HOV lanes from U.S. 101 to Julian Street in downtown San Jose
- Route 87: add northbound and southbound HOV lanes from Julian Street to I-280 and from I-280 to Route 85
- Complete Route 85 and U.S. 101 interchange and connector ramps in South San Jose and widen U.S. 101 to 8 lanes from Bernal Road to Metcalf Road
- Complete Route 85/87 interchange and connector ramps in San Jose
- Double track Caltrain: San Jose to Gilroy
- U.S. 101 interchange improvements at Bailey Avenue, Hellyer Avenue and Blossom Hill Road
- Route 17 improvements between Campbell and Los Gatos
- Bus Rapid Transit Corridor: Stevens Creek Boulevard; El Camino Real (Line 22)
- Route 85/U.S. 101 interchange improvements in Mountain Vie;, includes northbound and southbound HOV lane direct connectors
- Increase Caltrain service from San Jose to Gilroy; includes Caltrain corridor facilities and service improvements
- Caltrain extension to Salinas/Monterey (capital funds)
- Extend Vasona light-rail from Winchester Boulevard to Vasona Junction in Los Gatos
- Widen U.S. 101 from 6 lanes to 8 lanes with HOV lanes from Metcalf Road to Cochrane Road
- Expand Guadalupe light-rail vehicle maintenance facility

Track 1

1. I-880/Coleman Avenue interchange improvements
2. U.S. 101/Fourth Street/Zanker Road overcrossing and ramp modifications
3. I-280/I-680 connector to southbound U.S. 101: separate new ramp with Tully Road exit ramp
4. Route 85 northbound to I-280 northbound and I-280 exit to Foothill Expressway ramp improvements
5. Route 25/Santa Teresa Boulevard/ U.S. 101 interchange construction
6. Widen Route 237 for HOV lanes between Route 85 and U.S. 101
7. Additional Route 152 safety improvements between U.S. 101 and Route 156 (may include westbound Route 152 to westbound Route 156 overpass)
8. Upgrade Route 25 to 4-lane expressway standards (Santa Clara County portion of project)
9. Widen Route 85 from I-280 to Fremont Avenue
10. U.S. 101/Tennant Avenue interchange improvements in Morgan Hill
11. Trimble Road/De La Cruz Boulevard/ Central Expressway/U.S. 101 interchange improvements
12. U.S. 101/Tully Road interchange modifications
13. Add U.S. 101 auxiliary lane from Route 87 to Montague Expressway
14. Route 87/U.S. 101 ramp connection to Trimble Road interchange
15. Construct Butterfield Boulevard from San Pedro Road to Watsonville Road
16. Widen Montague Expressway from 6 lanes to 8 lanes (adds 2 mixed-flow lanes) from I-680 to U.S. 101
17. Widen Central Expressway from 6 lanes to 8 lanes (adds 2 HOV lanes) between Route 237 and De La Cruz Avenue
18. I-880/Stevens Creek Boulevard interchange improvements
19. Montague Expressway/Trimble overpass: westbound Montague Expressway to westbound Trimble Road
20. Extend Mary Avenue from Almanor Avenue to H Street, including Route 237/U.S. 101 overcrossing in Sunnyvale
21. Montague Expressway/San Tomas Expressway/U.S. 101/Mission College Boulevard interchange improvements

Blueprint

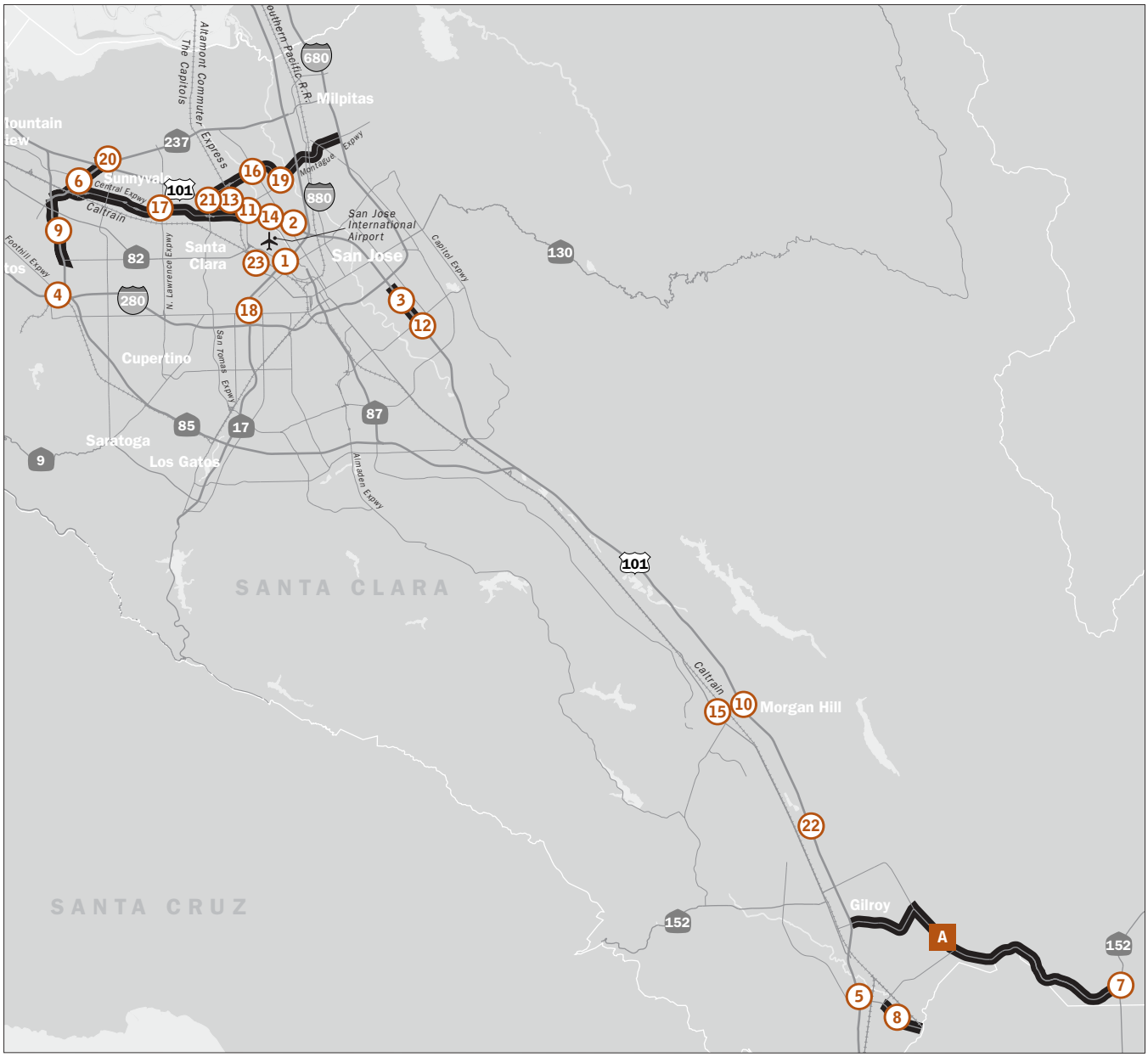
A. Route 152 to full expressway to San Benito County line

Not mapped:

- Additional countywide freeway interchange improvements (Santa Clara County)
- New rail extensions funded in sales tax but beyond 25-year horizon of RTP (to be determined in consultation with VTA)
- Future expressway improvements

Track 1 (continued)

22. U.S. 101/Buena Vista Avenue interchange construction
23. San Jose-Santa Clara fourth main track in Caltrain right of way and station upgrades (Phase 1)



- 1 Track 1 Project
- A Blueprint Project
- 980 Interstate Highway
- 101 U.S. Highway
- 1 State Highway
- Freeway
- Other Highway
- Major Arterial
- Rail Line
- Airport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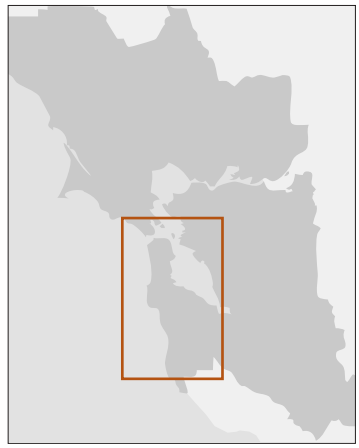


PENINSULA

The corridor includes San Mateo County between San Francisco Bay and the coast, and from Santa Clara County to San Francisco. The area by the Bay and west of U.S. 101 is suburban, with a number of older towns oriented around the Caltrain stations near El Camino Real. In recent years there has been considerable office and hotel development on the Bay side of U.S. 101. The major highway facilities in the corridor are U.S. 101, Interstate 280, Interstate 380, Routes 84 and 92 (between U.S. 101 and the coast). Route 82 (El Camino Real) is the major north-south arterial spine of the Peninsula, and Route 1 serves the coastal communities and provides recreational access to this area.

Major transit services include San Mateo County Transit District (SamTrans) local and express bus service, and Santa Clara Valley Transportation Authority (VTA) and San Francisco Muni bus service in the southern and northern ends of the corridor. Caltrain commuter rail service operates 80 weekday trains and soon will connect to BART at Millbrae. Caltrain also has an employer-based shuttle bus system for access to and from its stations. Major passenger intermodal facilities include the Transbay Terminal and the 4th and Townsend Caltrain terminal in San Francisco; BART stations in Colma and Daly City (four new stations will be added when the BART-to-San Francisco International Airport (SFO) extension opens in 2003); and several Caltrain stations.

Air passenger trips to SFO, the largest activity center in the corridor, are projected to increase to 60-plus million annual passengers by 2020. SFO also generates significant truck traffic from its air cargo operations.

Management Objectives

- Provide primarily operational improvements along U.S. 101 and Interstate 280 (e.g., new auxiliary lanes, ramp meters, HOV facilities, etc.)
- Manage freeway and local streets adjacent to freeways as one system to reduce overall delay
- Handle growth in intercounty commuting by BART/Caltrain and increased HOV lane use
- Partially reorient SamTrans bus service to feed BART and Caltrain stations
- Develop transit levels-of-service in the off-peak period (Caltrain)
- Maintain local transit service between communities and activity centers
- Support efficient transit operations via street improvements and provide safe and convenient bicycle and pedestrian access to transit facilities
- Improve east-west traffic operations and safety through signal timing and additional Caltrain grade separations
- Maximize travel time savings for employees and air passengers using transit/HOV lanes to San Francisco International Airport
- Ensure that coastside access improvements are consistent with coastal management plans

Caltrain/Chuck Fox

Committed Funding

Not mapped:

- BART to San Francisco International Airport (SFO) extension (under construction)
- Upgrade Route 1 (Devil's Slide Tunnel)
- U.S. 101 auxiliary lanes from Marsh Road to Route 92
- Caltrain express service between San Francisco and San Jose; includes passing tracks and rolling stock (Phase 1)
- Route 92 westbound slow-vehicle lane between Route 35 and I-280
- Widen Route 92 between Route 1 and Half Moon Bay city limits
- Construct Route 1 northbound and southbound lanes from Fassler to Westport Drive in Pacifica
- U.S. 101/Oyster Point Boulevard interchange improvements (Phases 2 and 3)
- Caltrain grade separations (to be determined)
- Caltrain local station improvements
- I-280/I-380 local access improvements
- Regional Express Bus Program: Route 82/El Camino Express, Daly City BART station to Palo Alto
- Widen Airport Boulevard from 2 to 4 lanes
- Widen Airport Boulevard bridge (14 feet widening of existing bridge structure)
- Extend Hickey Boulevard to construct 2-lane road between Mission Road and Hillside Boulevard in Colma
- San Mateo Downtown Transit Center
- U.S. 101 interchange improvements and ramp metering at Ralston Avenue, Hillsdale Boulevard and Millbrae Avenue
- Widen John Daly overcrossing at junction I-280 and Route 1
- Replace San Pedro Creek bridge and road approaches
- Widen Route 84 from 4 lanes to 6 lanes from El Camino Real to Broadway
- Route 92 between Half Moon Bay city limits and Pilarcitos Creek alignment and shoulder improvements
- Modify and interconnect existing traffic signals from Davey Glen Road to 41st Avenue, and 31st Avenue to Millbrae

Track 1

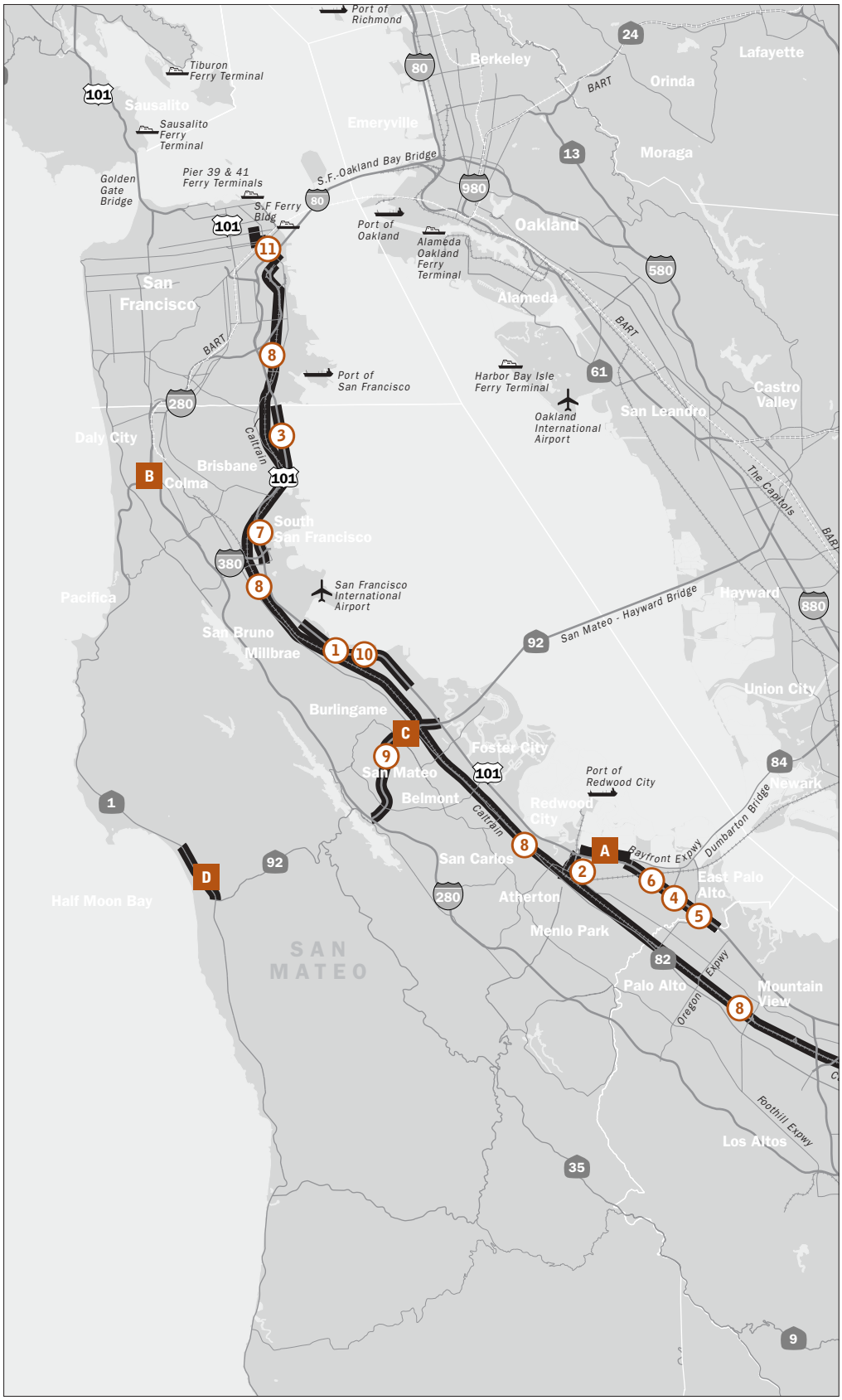
1. U.S. 101/Broadway interchange reconstruction
2. U.S. 101/Woodside Road interchange improvements
3. U.S. 101 auxiliary lanes from Sierra Point to San Francisco County line
4. U.S. 101/ Willow Road interchange reconstruction
5. U.S. 101/University Avenue interchange reconstruction
6. U.S. 101 auxiliary lanes from Marsh Road to Santa Clara County line
7. U.S. 101 auxiliary lanes from San Bruno Avenue to Grand Avenue
8. Caltrain electrification from San Francisco to Gilroy
9. Route 92 from U.S. 101 to Route 280: add westbound passing lane
10. U.S. 101 auxiliary lanes from 3rd Avenue to Millbrae and U.S. 101/Peninsula Avenue interchange reconstruction
11. Caltrain downtown extension/Transbay Terminal

Blueprint

- **A** Bayfront Expressway extension from Marsh Road to Woodside Road (4 lanes)
- **B** Widen I-280 eastbound by 1 lane from eastbound Route 1 to southbound I-280 and Serramonte Boulevard
- **C** Widen Route 92 between U.S. 101 and I-280 from 4 lanes to 6 lanes
- **D** Widen Route 1 from 2 lanes to 4 lanes within the Half Moon Bay city limits

Not mapped:

- Various U.S. 101 interchange improvements that facilitate ramp metering
- Caltrain grade separations
- Caltrain Express (Phase 2); includes additional track expansion and rolling stock



Track 1 Project

Blueprint Project

Interstate Highway

U.S. Highway

State Highway

Freeway

Other Highway

Major Arterial

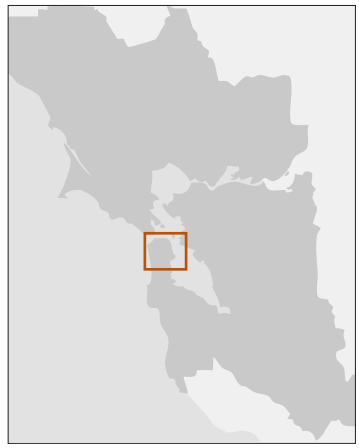
Rail Line

Airport

Ferry Terminal

Port

BART



SAN FRANCISCO

San Francisco is and will continue to be a major regional employment center and recreational destination for Bay Area residents and for domestic and international tourists. Within San Francisco, transportation facilities connect to the Bay Bridge, Golden Gate Bridge and Peninsula corridors. Downtown San Francisco has the densest concentration of employment in the region.

Major freeways connecting San Francisco with other parts on the region are Interstate 80, Interstate 280 and U.S. 101. Major arterials providing crosstown access within the city include 19th Avenue/Park Presidio Boulevard (Highway 1), Van Ness/Lombard (U.S. 101), the Embarcadero, Geary Boulevard, Ocean Avenue, Portola Drive, Market and Mission streets and 3rd Street. The freeways and most arterials operate at capacity during peak periods.

San Francisco also is served by an extensive array of regional transit services of all modes: BART; Caltrain; Golden Gate Transit buses and ferries; Oakland, Alameda and Vallejo ferries; and AC Transit and San Mateo County Transit District regional bus services. Major intermodal transit facilities include the Market Street corridor (BART, San Francisco Muni), Ferry Terminal and Transbay Terminal (see Peninsula corridor). The proportion of households without cars is the highest of any city in the Bay Area, as most residents rely on Muni for at least some of their mobility needs.

Management Objectives

- Maximize transit trips within and in/out of San Francisco
- Ensure transit services are dependable and safe
- Ensure well-coordinated signal systems
- Improve intersection safety for pedestrians, bicycles and autos
- Improve pedestrian and bicycle network
- Reduce conflicts between commercial delivery vehicles and auto traffic in the downtown
- Improve transit service to Mission Bay and South of Market to support redevelopment

SAN FRANCISCO

Committed Funding

Not mapped:

- Third Street light-rail transit extension to Bayview Hunters Point (initial operating segment)
- Remove U.S. 101 Central Freeway structure
- U.S. 101 Central Freeway reconstruction due to earthquake damage
- Bernal Heights Street system upgrade
- Doyle Drive replacement (environmental study — see also Golden Gate corridor)
- South Basin Bridge (environmental study only)
- Muni F-Embarcadero extension
- Design and engineering study for Treasure Island ferry terminal

Track 1

1. Third Street light-rail transit extension to Chinatown (Central Subway)
2. Balboa Park BART station expansion (planning phase only)
3. Doyle Drive replacement—see also Golden Gate corridor
4. Caltrain Downtown Extension/Transbay Terminal—see also Peninsula corridor

Not mapped:

- Bicycle/pedestrian projects and programs
- Traffic calming
- Traffic signals and signs
- Transit enhancements
- Integrated Traffic Management System
- Bus Rapid Transit Program

Blueprint

A Treasure Island on and offramps

Not mapped:

- Muni: electrify additional trolley routes
- Muni Geary Corridor environmental study
- Major transit corridor studies and extensions
- Major roadway capital projects
- Bus Rapid Transit
- Grade separation

- 1 Track 1 Project
- A Blueprint Project
- 980 Interstate Highway
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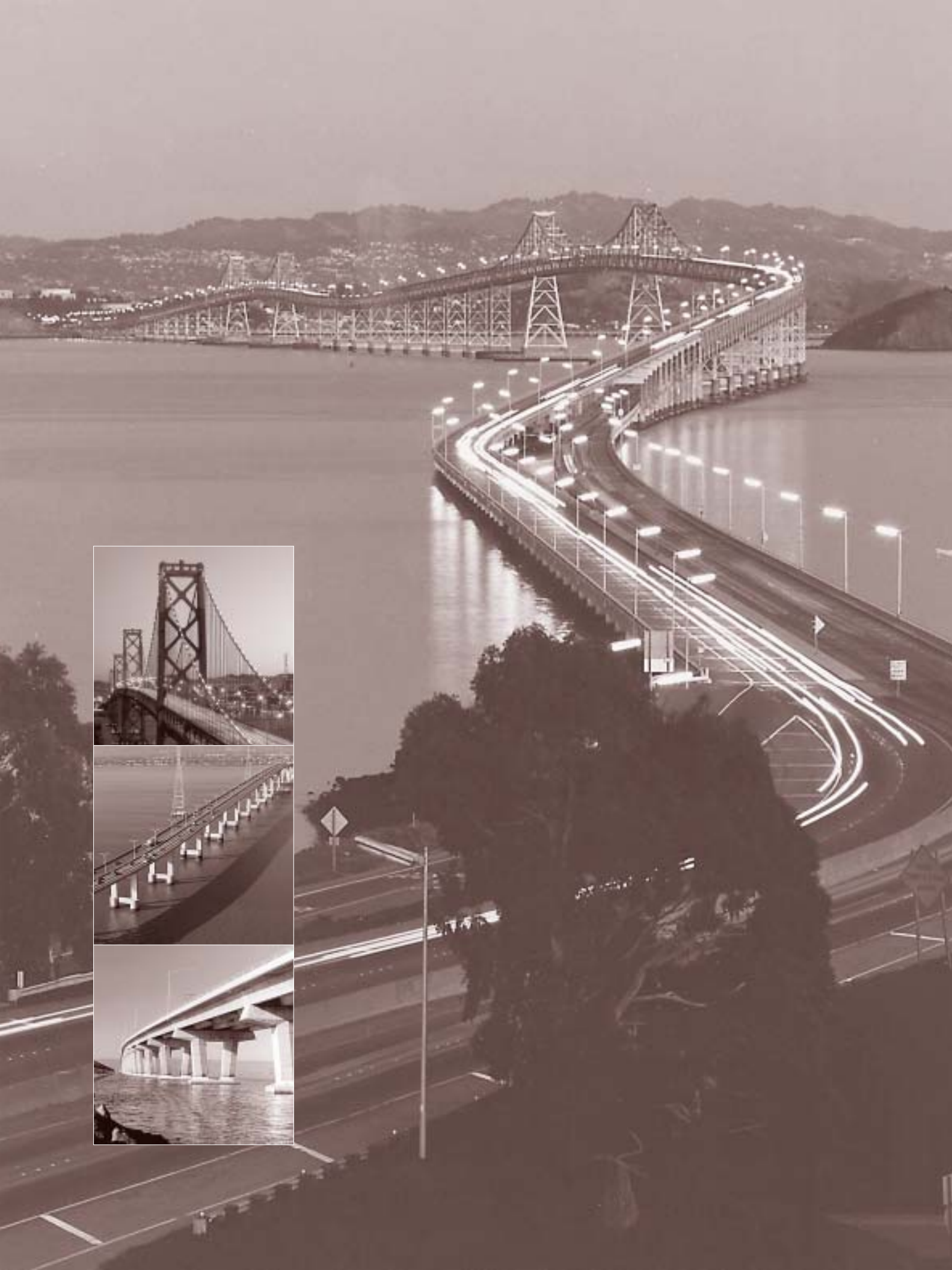
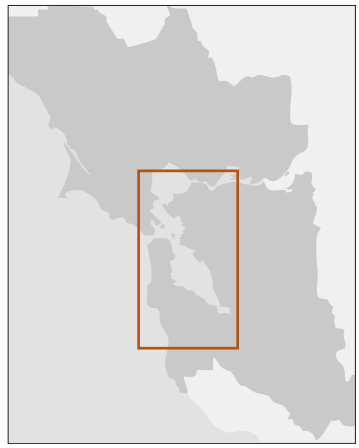
- Major Arterial
- Rail Line
- Ferry Terminal
- Port
- BART





TRANSBAY

San Francisco-Oakland Bay Bridge

The corridor includes the San Francisco-Oakland Bay Bridge and approaches, which is a 10-lane facility with exclusive lanes for carpools on the eastern approach. Transit plays an important role with services that include BART, ferry services between San Francisco and Solano/Alameda counties, and bus service by AC Transit. The Transbay Terminal is the major intermodal passenger facility along with various BART stations in the East Bay. Traffic on the Bay Bridge is at capacity for extended periods during the day.

Richmond-San Rafael Bridge

This bridge serves as the transbay connection between Interstate 580 in Contra Costa County and U.S. 101 in Marin County. Golden Gate Transit provides bus service over the bridge connecting to BART (El Cerrito del Norte) and the Larkspur Ferry terminal. The new Richmond Parkway is a major access route to the bridge for traffic to/from the north and east on Interstate 80.

San Mateo-Hayward and Dumbarton Bridges

The San Mateo-Hayward and Dumbarton bridges both connect to Interstate 880 in Alameda County and U.S. 101 in San Mateo County. East and West Bay rail services are linked through employer-sponsored shuttles on the San Mateo-Hayward Bridge, and express bus service across the Dumbarton Bridge sponsored by a consortium of public transit operators. Travel on the bridges continues to be dominated by morning commute trips from Alameda County into San Mateo and Santa Clara counties, and the reverse in the evening.

Management Objectives

- Accommodate future growth in transbay travel by transit (BART, bus, ferry) and HOV lanes; increase transit service as demand warrants
- Encourage ridesharing and transit use via bridge toll policies
- Optimize BART and AC Transit coordination in transbay transit markets
- Ensure connections between bridges and U.S. 101, Interstate 580, Interstate 880 and Interstate 80 function properly and do not overload these facilities
- Manage traffic using transbay bridges to protect local streets from overload
- Accommodate transbay bicycle access

Committed Funding

Not mapped:

- Replace eastern span of Bay Bridge for seismic protection, including new traffic shoulders and bicycle/pedestrian path
- San Mateo-Hayward Bridge widening: widen low-rise trestle and eastern approach from I-880 from 4 lanes to 6 lanes with shoulders (under construction), extend existing westbound HOV lane 1 mile west along eastern approach from I-880, construct new pedestrian/bicycle overcrossing
- Seismic upgrades on the bridges: Richmond-San Rafael Bridge, Bay Bridge western span
- Richmond-San Rafael Bridge deck replacement
- Dumbarton Express park-and-ride: 90 spaces on Decoto Road near I-880 by the Dumbarton Bridge (includes right-of-way acquisition)
- Dumbarton Bridge: widen Bayfront Expressway from Dumbarton Bridge to U.S. 101/Marsh Road interchange
- I-880/Route 92 interchange improvements in Hayward
- Regional Express Bus Program: I-80/Richmond transbay
- Regional Express Bus Program: Fremont BART station to Stanford University
- Expanded shuttle service on San Mateo-Hayward Bridge

Track 1

1 Dumbarton rail bridge rehabilitation

Not mapped:

- Express bus services

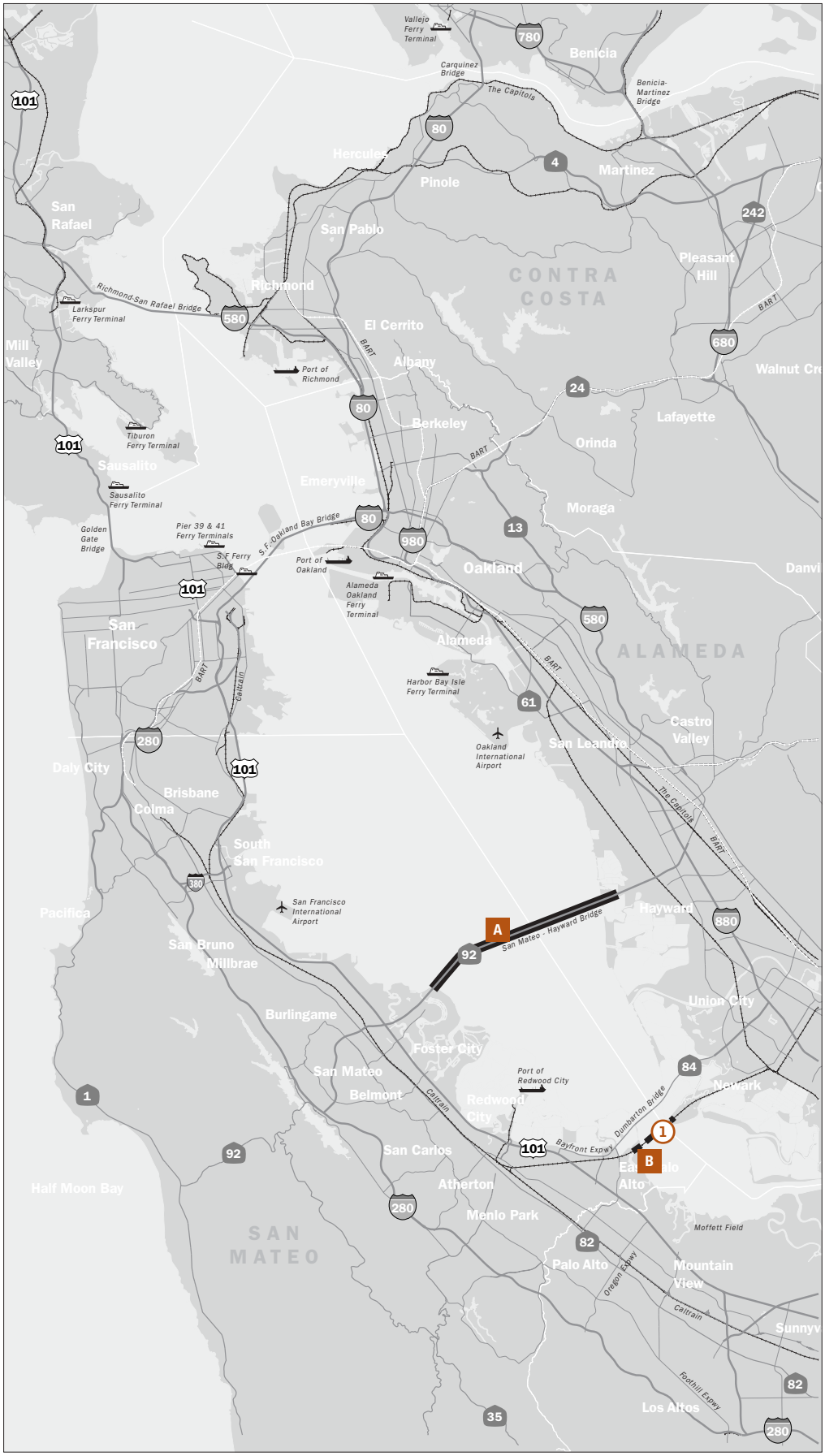
Blueprint

A San Mateo-Hayward Bridge: add HOV/transit lanes to bridge beyond current improvements (concept under evaluation in Bay Crossings Study)

B Dumbarton rail service (needs operating funds)

Not mapped:

- New rail crossing over/under the Bay (Bay Crossings Study)
- New auto crossing over/under the Bay (Bay Crossings Study)
- Ferry services as defined in MTC's Blueprint for the 21st Century



Track 1 Project

Blueprint Project

Interstate Highway

U.S. Highway

State Highway

Freeway

Other Highway

Major Arterial

Rail Line

Airport

Ferry Terminal

Port

BART

INTERREGIONAL GATEWAYS

The region's influence extends beyond the nine Bay Area counties. The Bay Area's transportation system serves a growing number of commuters choosing to live outside the region for lower housing prices or other quality of life reasons. In addition, the region's freeways and rail systems move goods and freight into and out of the region, serving statewide, national and international markets. The four main interregional corridors are: Interstate 580, Interstate 80, Route 17 and U.S. 101. Other less traveled gateways are Route 4, Route 12 and Route 152. The Altamont I-580 corridor is a major truck route for distribution centers located in the Central Valley. The Northwestern Pacific rail line is used to haul freight from counties north of the Bay Area.

MTC travel projections show that in-commuting from outside the Bay Area will nearly double over the next 20 years. The largest increase will be coming from the Central Valley via Yolo/Sacramento counties and San Joaquin/Stanislaus/Merced counties; in-commuting from Santa Cruz and San Benito/Monterey counties in the south and Mendocino/Lake counties in the north also is expected to increase. Also, the gateways handle significant recreational travel to beaches, the Sierras and the Delta, particularly on weekends and in the summer.

The Bay Area currently has three international airports and five seaports, which all serve travelers and freight from outside the region. Cargo tonnage handled by the region's airports and seaports is projected to triple and double respectively over the next 20 years. Much of the cargo brought into these ports is distributed outside the region by truck and rail.

Management Objectives

- Recognize Interstate 580, Interstate 80, Route 17 and U.S. 101 south as interregional gateways to encourage transit/HOV lane use
- Develop an equitable ramp-metering plan
- Maintain reliable freeway operations in off-peak period for freight mobility; use weigh-in-motion technology to expedite trucks
- Improve access to Bay Area airports and seaports
- Complete gaps in the existing HOV lane system to facilitate express bus service on HOV lanes to major employment centers

Committed Funding

Not mapped:

- Caltrain extension to Salinas/Monterey
- Altamont Commuter Express (ACE) rail service operating and station/track improvements (4 round trips daily)

Track 1

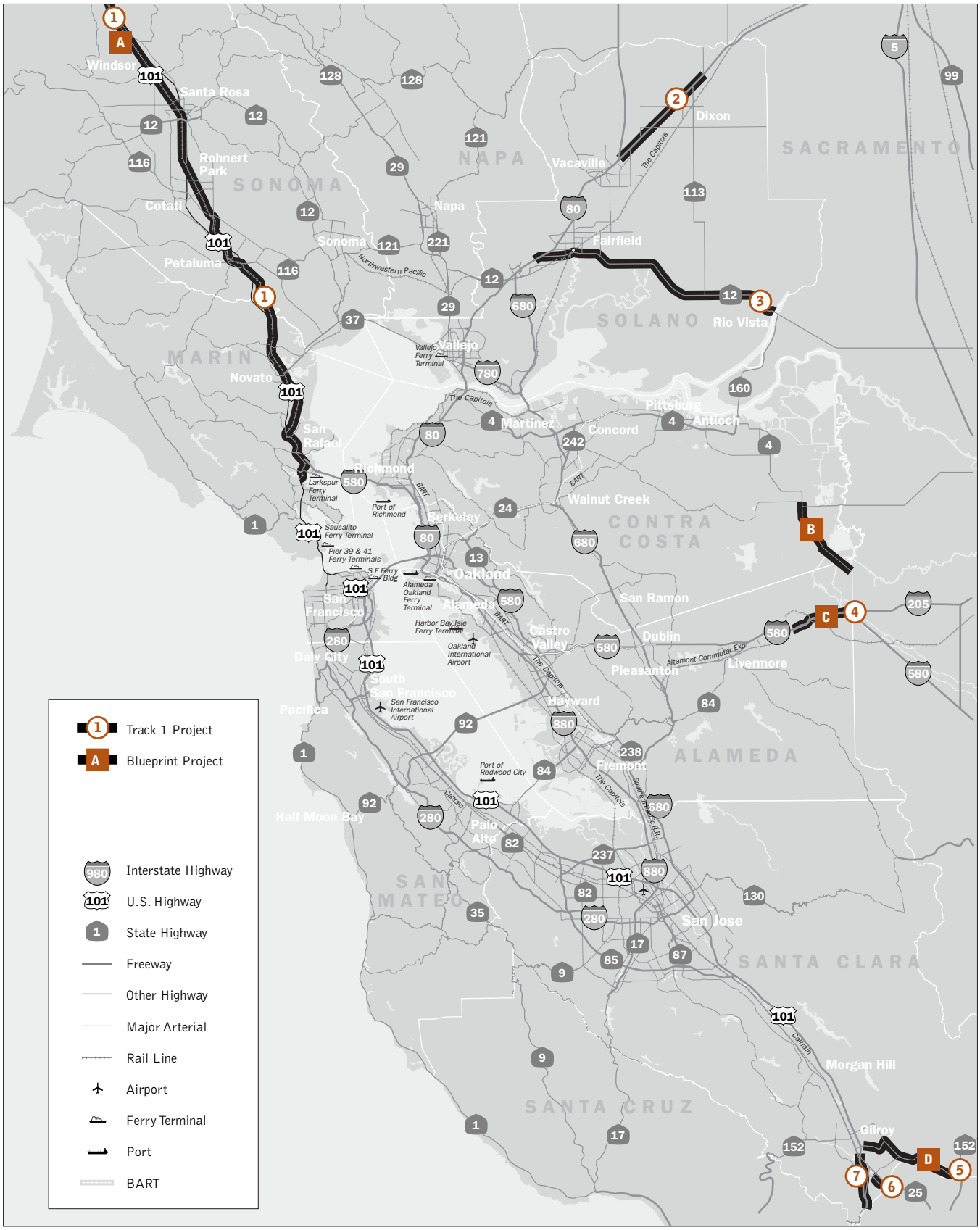
1. North Coast Railroad Authority track maintenance and rehabilitation
2. Widen I-80 from 6 lanes to 8 lanes between Vacaville and Dixon (Phase 1)
3. Operational and safety improvements on Route 12 from Sacramento River to I-80 (Phase 1)
4. I-580 auto/truck separation lane at I-580/I-205 interchange
5. Additional Route 152 safety improvements between U.S. 101 and Route 156 (may include westbound Route 152 to westbound Route 156 flyover)
6. Upgrade Route 25 to 4-lane expressway standards (Santa Clara County portion of project)
7. Route 25/Santa Teresa Boulevard/ U.S. 101 interchange construction

Blueprint

- **A** Sonoma-Marin Rail passenger service
- **B** Tracy-Brentwood Expressway: expressway on new alignment around Byron
- **C** Westbound truck climbing lane over Altamont Pass
- **D** Route 152 to full expressway to San Benito County line

Not mapped:

- Expansion of ACE service
- Intra-Tri-Valley express bus service
- San Joaquin County to Tri-Valley and Dublin/Pleasanton BART express bus service
- Capitol Corridor intercity rail improvements



ATTACHMENTS

ATTACHMENT A— PROJECTS BY COUNTY

ATTACHMENT B— TRANSPORTATION CONTROL MEASURES (TCMs)

ATTACHMENT C— RTP SUPPLEMENTARY REPORTS

ATTACHMENT D— RTP-RELATED PLANS

ATTACHMENT E— AMENDMENT

RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS (In millions of 2001 dollars)	NOTES
	REGION		
21013	Rehabilitation of Bay Area state-owned toll bridges	$475.0	
21015	Seismic retrofit of Bay Area state-owned toll bridges, excluding San Francisco-Oakland Bay Bridge (see #21778 and #21879 below)	$1,170.0	
21016	Low-Income Flexible Transportation Program (LIFT)	$30.0	
	DIABLO		
94541	New Benicia-Martinez Bridge: construct new bridge span east of existing span (4 mixed-flow lanes and 1 slow-vehicle lane). Includes new toll plaza and upgrades to I-680/I-780 interchange and I-680/Marina Vista Road interchange, and reconstruction of the existing bridge for 4 mixed-flow lanes and bicycle and pedestrian lane	$652.8	Regional Measure 1 Toll Bridge Program
	EASTSHORE-NORTH		
94540	Carquinez Bridge replacement: construct new suspension bridge west of existing bridges (4 westbound lanes, including an HOV lane, plus new bicycle/pedestrian pathway) and modify Crockett interchange	$479.8	Regional Measure 1 Toll Bridge Program
	GOLDEN GATE		
21012	Golden Gate Bridge seismic retrofit (completes Phases 1 through 3)	$302.5	
21320	Golden Gate Bridge moveable median barrier	$8.0	
	TRANSBAY: BAY BRIDGE		
21778	San Francisco-Oakland Bay Bridge: seismic retrofit of the west span and west approach	$700.0	
21879	San Francisco-Oakland Bay Bridge: east span seismic safety project	$2,600.0	
	TRANSBAY: RICHMOND-SAN RAFAEL BRIDGE		
21014	Richmond-San Rafael Bridge deck replacement	$53.4	Regional Measure 1 Toll Bridge Program
	TRANSBAY: SAN MATEO-HAYWARD AND DUMBARTON BRIDGES		
21601	Dumbarton Bridge: widen Bayfront Expressway (Route 84) from Dumbarton Bridge to US 101/Marsh Road interchange	$33.8	Regional Measure 1 Toll Bridge Program
94514	I-880/Route 92 interchange improvements in Hayward	$134.2	Regional Measure 1 Toll Bridge Program
94657	Widen San Mateo-Hayward Bridge: widen low-rise trestle and eastern approach from I-880 from 4 to 6 lanes with shoulders (under construction), extend existing westbound HOV lane 1 mile west along eastern approach from I-880 (under construction), construct new pedestrian/bicycle overcrossing	$217.5	Regional Measure 1 Toll Bridge Program. Western approach from US 101 was widened from 4 to 6 lanes to match high-rise section of bridge in 1996. Current project completes widening work.

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	BAY AREA REGION				
21001	Freeway Operations Strategies/Traffic Operations Systems (TOS)	$45.5	$0.0	$45.5	
21002	Freeway Service Patrol/freeway call boxes	$179.1	$139.5	$39.6	
21003	Traffic Engineering Technical Assistance Program (TETAP)/arterial signal retiming	$31.9	$0.0	$31.9	
21004	Pavement Management Technical Assistance Program (P-TAP)	$15.4	$0.0	$15.4	
21005	TransLink®	$392.0	$253.2	$138.8	
21006	Regional transit information system and transportation marketing	$77.4	$48.5	$28.9	
21007	Rideshare Program[3]	$98.0	$42.1	$55.9	
21008	TravInfo®	$152.1	$26.1	$126.0	
21009	Spare the Air campaign	$25.0	$0.0	$25.0	
21010	Performance monitoring	$2.8	$0.0	$2.8	
21011	Transportation for Livable Communities/Housing Incentive Program - regional program	$279.2	$90.0	$189.2	
21356	Regional Transit Expansion Program reserve funding	$1,536.0	$295.0	$386.0	Remaining shortfall to be funded in Blueprint

[1] **Existing Funding** refers to funds that are committed or are considered to be reasonably available in the short term but which do not in themselves fully cover project costs. This category includes local funding from sales taxes, development impact fees and other sources, as well as already programmed state and federal funds.

[2] **Track 1 Funds** refers to discretionary state and federal funds anticipated to be available over the long term of the RTP (and not already programmed in "Existing Funding").

[3] As an exception to MTC's policy to allocate federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds for the Regional Rideshare Program beginning in FY 2003-04, Contra Costa County will use Transportation Fund for Clean Air (TFCA) program manager funds for its population-based share of the program (14.5% annually averaged over the 25 years, or approximately $10 million over 25 years). If Contra Costa County does not approve its population share of TFCA program manager funds for this purpose, its share of program funding will revert to CMAQ.

RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	ALAMEDA COUNTY-WIDE		
94522	Local streets and roads pavement maintenance (committed revenues shown)	$574.9	Shortfall remains (see Track 1)
21854	Non-pavement maintenance (sidewalks, lighting, drainage, landscaping, etc.) (committed revenues shown)	$709.1	Shortfall remains
21863	Local bridge maintenance (committed revenues shown)	$59.8	Shortfall remains
94525	BART (Alameda County share) – transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements, equipment, fixed facilities and other capital assets; does not include expansion except BART-to-SFO extension)	$7,151.5	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
94526	AC Transit (Alameda County share) – transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$6,080.6	Federal, state and local funds (including transit fares) available directly to operator; capital and operating shortfalls remain (see Track 1)
94527	Livermore Amador Valley Transit Authority (LAVTA) – transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$304.7	Federal, state and local funds (including transit fares) available directly to operator
94528	Union City Transit – transit operating and capital improvement program (including replacement, rehabilitation and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$75.6	Federal, state and local funds (including transit fares) available directly to operator
21461	Local transportation improvements (includes streets and roads, transit, bicycle and pedestrian, and other improvements)	$368.7	2000 Measure B sales tax project
21464	Paratransit for AC Transit, BART, non-mandated city programs, service gap coordination	$172.4	2000 Measure B sales tax project
21465	Transit enhancements funded by transit center development funds	$2.1	2000 Measure B sales tax project
21468	Transit operations – AC Transit, Welfare to Work, Alameda ferries, Altamont Commuter Express (ACE), Union City Transit, Livermore Amador Valley Transit Authority, and countywide express bus	$361.8	2000 Measure B sales tax project
21992	AC Transit bus corridor improvements	$20.0	2000 Measure B sales tax project
98628	BART Advanced Automatic Train Control System (county share)	$24.2	
94027	Bicycle and pedestrian projects	$160.5	Funds are from Transportation Development Act (TDA) Article 3, Bicycle Transportation Account, local TEA 21 Enhancement funds, and local sales tax funds.
	EASTSHORE – NORTH		
21479	Extend Horton Street between 53rd Street and Haruff (under Powell Street Bridge) in Emeryville	$2.0	100% locally funded
94008	I-80 bicycle and pedestrian overcrossing in Berkeley	$6.5	
21571	Widen I-80 from 5 lanes to 6 lanes to extend eastbound HOV lane from San Francisco-Oakland Bay Bridge toll plaza to Powell Street	$6.6	
94021	Extend Mandela Parkway in Oakland; completes freeway congestion reliever route	$7.3	4-lane arterial from 32nd Street in Oakland to Hollis Street in Emeryville; extension replaces 32nd Street onramp and off-ramp. Phase 1 (32nd Street to Horton Street) is under construction.

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	EASTSHORE – SOUTH		
98153	Reconstruct MacArthur Boulevard onramp to restore access to eastbound I-80 and westbound I-580	$17.0	
98188	San Pablo Avenue Smart Corridor (Phase 2)	$4.4	
21355	Widen East Lewelling Boulevard in San Leandro	$11.4	2000 Measure B sales tax project
21431	Regional Express Bus Program: I-880/Hayward BART Station to Silicon Valley	$4.8	2000 Traffic Congestion Relief Program project
21451	East 14th Street/Hesperian Boulevard/150th Street channelization improvements	$1.0	2000 Measure B sales tax project
21452	Downtown Oakland streetscape improvements (Broadway, 14th Street and Telegraph Avenue)	$5.8	2000 Measure B sales tax project
21453	Fruitvale BART Station transit village	$12.9	2000 Measure B sales tax project
21454	Hesperian Boulevard/Lewelling Boulevard channelization improvements	$1.2	2000 Measure B sales tax project
21462	Local street improvements in Newark	$1.4	2000 Measure B sales tax project
21463	Local street improvements in Oakland	$4.6	2000 Measure B sales tax project
21466	Washington Avenue/Beatrice Street interchange improvements	$1.3	2000 Measure B sales tax project
21467	New arterial along eastern edge of Westgate Shopping Center between Davis Street and Williams Street	$10.0	2000 Measure B sales tax project
21886	Industrial Parkway upgrade between Whipple Road and improved segment of the parkway in Hayward	$0.5	Included as TEA 21 federal earmark
94017	Port of Oakland Joint Intermodal Terminal	$28.9	Improves ship-to-rail freight container transfers and reduces truck traffic on I-80
94020	Seismic retrofit of Webster and Posey tunnels between the cities of Alameda and Oakland, Stage I: seismic retrofit inside tubes (under construction); Stage II: seismic retrofit outside tubes to strengthen surrounding soils	$26.0	Funded by the State Highway Operation and Protection Program
94504	Oakland Airport: construct 4-lane cross-airport roadway (mostly on Port of Oakland property)	$114.7	1986 Measure B sales tax project
94506	Route 84 upgrade to expressway between Route 238 and I-880 in Fremont	$118.2	1986 Measure B sales tax project
94507	Route 238 (Hayward Bypass) 4-lane expressway: I-580 to Harder (Stage 1 only)	$148.3	1986 Measure B sales tax project; project is currently under court and Caltrans review
94508	Mission Boulevard safety and operational improvements from Industrial Parkway to Route 84	$55.8	1986 Measure B sales tax project
94515	I-580 connections to Hayward Bypass (Route 238) and interchange improvements: northbound Hayward Bypass to northbound I-580 and northbound Hayward Bypass to westbound I-238	$22.6	
94524	Amtrak Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0	Effective October 2001

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS (In millions of 2001 dollars)	NOTES
	FREMONT-SOUTH BAY		
21480	Route 84/Ardenwood Boulevard westbound offramp intersection improvements	$0.6	100% locally funded
21481	Extend Cushing Parkway from Automall Parkway/Boyce Road to Cushing Parkway/Fremont Boulevard/I-880	$11.7	100% locally funded
21482	Extend Fremont Boulevard to connect to I-880/Dixon Landing Road	$4.5	100% locally funded
21483	Widen Stevenson Boulevard from 4 lanes to 6 lanes from I-880 to Blacow Road	$1.0	100% locally funded
21484	Widen Kato Road from Warren Avenue to Milmont Drive	$3.0	100% locally funded
21485	Widen Stevenson Boulevard from 2 lanes to 4 lanes from Gallaudet Drive to Mission Boulevard	$3.4	100% locally funded
21486	Paseo Padre Parkway/Peralta Boulevard (Route 84) intersection improvements	$0.5	100% locally funded
21487	Widen Mowry Avenue from Mission Boulevard to Peralta Boulevard	$0.5	100% locally funded
21488	Warren Avenue/Warm Springs Boulevard intersection improvements	$0.5	100% locally funded
21896	Route 84 vertical and horizontal alignment improvements in Fremont and San Leandro (3 miles to 5.1 miles east of I-680)	$28.4	Funded by State Highway Operation and Protection Program (SHOPP)
94030	Reconstruct I-880/Route 262 interchange and widen I-880 from Route 262 (Mission Boulevard) to the Santa Clara County line from 8 lanes to 10 lanes (8 mixed-flow and 2 HOV lanes)	$110.5	
	SUNOL GATEWAY		
21339	ACE train station track improvements in Alameda County, including parking improvements at downtown Livermore station and Vasco Road station	$8.5	
21437	Regional Express Bus Program: I-680 to Pleasant Hill BART Station	$0.4	2000 Traffic Congestion Relief Program project
21438	Regional Express Bus Program: Tri-Valley to Sun Microsystems	$1.2	2000 Traffic Congestion Relief Program project
21458	I-680/I-880 cross connector (study only)	$2.3	2000 Measure B sales tax project
21460	Iron Horse bicycle, pedestrian and transit route	$5.8	2000 Measure B sales tax project
21469	I-680/West Las Positas crossing improvements	$29.4	100% locally funded
21470	I-680/Sunol Boulevard ramp improvements; includes signal improvements and widening under existing structure	$0.9	100% locally funded
21471	I-680/Stoneridge Drive interchange improvements	$7.5	100% locally funded
21472	I-680/Bernal Avenue interchange improvements	$17.5	100% locally funded
94501	I-580/I-680 interchange: construct connector southbound I-680 to eastbound I-580, including new local ramps	$115.8	1986 Measure B sales tax project; under construction
98141	I-680 Sunol Grade southbound and northbound HOV lanes, ramp metering and auxiliary lane from Route 84 to Route 237 (possible value pricing project)	$125.0	Companion to Santa Clara County project #98140

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	TRANSBAY: SAN MATEO-HAYWARD AND DUMBARTON BRIDGES		
21417	Dumbarton Express park-and-ride: 90 spaces on Decoto Road near I-880 by the Dumbarton Bridge (includes right-of-way acquisition)	$1.5	
21433	Regional Express Bus Program: Fremont BART Station to Stanford University	$2.2	2000 Traffic Congestion Relief Program project
	TRI-VALLEY		
21100	Vasco Road/I-580 interchange improvements	$40.8	
21347	Rehabilitate and widen Route 84 from I-580 to Scott Street	$11.1	Funded by State Highway Operation and Protection Program (SHOPP)
21455	Widen I-238 from 4 lanes to 6 lanes between I-580 and I-880; includes auxiliary lanes on I-880 south of I-238	$101.1	2000 Measure B sales tax project
21456	I-580 auxiliary lane between Santa Rita Road and Airway Boulevard	$11.6	2000 Measure B sales tax project
21457	I-580 interchange improvements at Castro Valley Road, Redwood Road, and Center Street in Castro Valley	$10.7	2000 Measure B sales tax project
21473	Extend North Canyons Parkway westerly to Dublin Boulevard	$10.0	100% locally funded
21474	I-580/North Livermore Avenue interchange improvements	$25.0	100% locally funded
21475	I-580/First Street interchange improvements	$20.0	100% locally funded
21476	Isabel Avenue/Route 84/I-580 interchange improvements: build second bridge to provide 6 lanes over I-580 (Phase 2)	$25.0	100% locally funded; refer to Alameda County project #21105 for Phase 1
21477	I-580/Greenville Road interchange improvements	$20.0	100% locally funded
21478	Extend Las Positas Road between First Street and Vasco Road	$1.5	100% locally funded
21489	I-580/San Ramon Road/Foothill Road interchange improvements	$3.9	100% locally funded
21490	I-580/Fallon Road/El Charro Road interchange improvements	$8.4	100% locally funded
21492	Extend Scarlett Drive from Dublin Boulevard to Dougherty Road	$5.8	2000 Measure B sales tax project
21493	I-580/I-680 Transportation Operations System (TOS)	$0.6	
21570	Livermore Valley Center Parking Structure	$8.5	
94029	Altamont Commuter Express (ACE) rail service operating and station/track improvements (4 round trips daily)	$11.0	2000 Measure B sales tax project
94034	Widen Isabel Avenue to 4 lanes (along future Route 84 alignment) from I-580 south to Vallecitos Road and improvements along Route 84 through Pigeon Pass	$105.2	2000 Measure B sales tax project and local funds; does not include new interchange at Route 84/I-580

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	ALAMEDA COUNTY-WIDE				
94001	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$24.7	$0.0	$24.7	
94002	Non-MTS streets and roads pavement rehabilitation shortfall (see Committed projects)	$253.2	$0.0	$12.7	Remaining shortfall to be funded in Blueprint
94003	BART capital replacement program shortfall (see Committed projects – excludes seismic program)	$195.6	$0.0	$195.6	County share based on population
94004	AC Transit capital program shortfall (see Committed projects)	$165.8	$0.0	$165.8	County share based on service area population
98549	Transportation for Livable Communities – county program	$29.3	$0.0	$29.3	County share of regional program for community development projects linked to transportation
98558	Surface Transportation Program planning funds for the county	$9.7	$0.0	$9.7	
21145	Corridor Management Program: signal interconnect, transit priority, SMART corridors, and other improvements	$47.0	$0.0	$47.0	
21137*	Bus acquisition for transbay, express, subscription or local service	$17.0	$0.0	$17.0	Additional bus acquisition to be funded in Blueprint
21146	Express bus program (capital costs)	$5.2	$0.0	$5.2	Operating subsidy funded through 2000 Measure B sales tax
21147	Ferry capital expansion and terminal improvements/relocation	$24.6	$14.6	$10.0	
21129*	BART automatic fare collection equipment expansion	$18.1	$0.0	$18.1	Additional improvements to be funded in Blueprint
21141*	Downtown Oakland intermodal transit center; focuses on streetscape improvements on Broadway	$11.2	$8.2	$3.0	
21135*	Major corridor enhancements in northern Alameda County	$3.0	$0.0	$3.0	Additional enhancements to be funded in Blueprint
21128	Pedestrian maintenance and safety improvements in northern Alameda County	$4.0	$0.0	$4.0	Additional improvements to be funded in Blueprint
21148	Bicycle and pedestrian overcrossing access improvements in northern Alameda County	$1.0	$0.2	$0.8	
98208	Soundwalls	$10.0	$0.0	$10.0	
	DELTA				
21139*	Vasco Road safety improvements (Alameda County portion only)	$13.9	$12.5	$1.4	2000 Traffic Congestion Relief Program project

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[2] **Track 1 Funds** refers to discretionary state and federal funds anticipated to be available over the long term of the RTP (and not already programmed in "Existing Funding").

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	EASTSHORE – NORTH				
21119*	Extend Mandela Parkway (involves widening existing Yerba Buena Avenue from Horton Street to Hollis Street, and includes channelization and traffic signal improvements)	$2.8	$0.0	$2.8	
21134*	Rapid Bus Transit (RBT) in San Pablo Avenue corridor	$5.5	$0.0	$5.5	
21142*	Intermodal transit improvements at the Emeryville Amtrak Station (includes parking garage)	$7.6	$4.6	$3.0	Remaining phases to be funded in Blueprint
21143	I-80/Ashby-Shellmound interchange modifications; involves construction of two roundabouts and a separate bike-pedestrian overcrossing	$8.0	$0.0	$8.0	Remaining phases to be funded in Blueprint
21144*	I-80/Gilman Avenue interchange improvements (includes roundabouts)	$1.5	$0.0	$1.5	
	EASTSHORE – SOUTH				
21101*	Extend Tinker Avenue from Main Street to Webster Street/Constitution Way and construct College of Alameda Transit Center	$17.0	$13.0	$4.0	
21103*	Construct Central Avenue 4-lane overpass at Union Pacific Railroad (environmental and design phases only)	$0.6	$0.0	$0.6	
21107	42nd Avenue/High Street access improvements to I-880 in Oakland; includes widening and realignment of local streets, connector roads, and ramps near interchange	$12.6	$1.1	$11.5	
21110*	Route 260 to I-880 connection improvements between Alameda and Oakland	$2.0	$0.3	$1.7	
21111*	Capital Corridor mitigation for track work at Jack London Square	$25.0	$10.0	$15.0	Assumes $15 million in state ITIP funding
21117*	Realign Langley Street (access point for Oakland International Airport North Field; includes reconstruction of Route 61 (Doolittle Drive) and new traffic signal at Route 61/Langley Street	$2.5	$1.5	$1.0	
21118*	MacArthur BART Station intermodal transit village (includes replacement parking)	$100.0	$75.0	$25.0	Assumes $10 million in state ITIP funding
21120*	Widen Marina Boulevard from Alvarado Boulevard to San Leandro Boulevard	$1.6	$0.0	$1.6	
21121*	Widen Thornton Avenue from 2 lanes to 4 lanes between Gateway Boulevard and Hickory Street	$4.0	$2.0	$2.0	
21122*	Widen and reconstruct Route 262/ Warren Avenue/ I-880 interchange and East Warren Avenue/UPRR grade separation	$160.8	$120.8	$40.0	Assumes $20 million in state ITIP funding
21124*	Widen Union City Boulevard from 4 lanes to 6 lanes from Paseo Padre in Fremont to Industrial Parkway in Hayward	$10.0	$8.0	$2.0	

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RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	EASTSHORE – SOUTH (continued)				
21131*	BART-Oakland International Airport connector	$232.0	$112.0	$120.0	Assumes $45 million in state ITIP funding
21136*	Rapid Bus Transit (RBT) in Oakland/Berkeley/San Leandro corridor (Phase 1)	$151.2	$23.2	$128.0	Assumes $111 million in federal discretionary Section 5309 bus funds
21138*	San Leandro BART Station transit village (Phase 1); includes parking structure, kiss-and-ride and bus improvements	$10.9	$0.0	$10.9	Remaining phases to be funded in Blueprint
21140	Westbound I-580 to new Route 238 (Hayward Bypass) connection	$8.8	$0.0	$8.8	
21495	Joint Intermodal Terminal – Port of Oakland access improvements (Phase 1)	$42.0	$12.0	$30.0	Assumes $30 million in state ITIP funding
94032	Route 238 (Hayward Bypass): 4-lane expressway from Harder to Industrial Parkway (Stages 2 and 3)	$76.6	$0.0	$76.6	Stage 1 is fully funded as a 1986 Measure B sales tax project; however, project is currently under court and Caltrans review.
98207*	I-880/Broadway-Jackson interchange improvements (Phase 1)	$24.5	$14.0	$10.5	
21357	Capitol Corridor Phase 1 expansion (for 16 daily round trips)	$126.0	$28.0	$98.0	Assumes $98 million in state ITIP funding
	FREMONT – SOUTH BAY				
21114*	Rail grade separations at Washington Boulevard/Paseo Padre Parkway at Union Pacific Railroad in Fremont	$59.5	$52.0	$7.5	
21123*	Union City Intermodal Station (Phase 2), includes 19 bus bays and a kiss-and-ride loop road	$5.9	$3.9	$2.0	Remaining phases to be funded in Blueprint
21125*	Route 84 southbound HOV extension from Newark Boulevard to I-880	$4.0	$0.0	$4.0	
21126*	Route 84 southbound HOV onramp from Newark Boulevard to existing Route 84 southbound HOV lane	$3.3	$0.0	$3.3	
21132*	BART extension to Warm Springs	$634.9	$521.9	$113.0	Assumes $80 million in state ITIP funding; 2000 Traffic Congestion Relief Program project
94012*	Union City Intermodal Station access improvements (Phase 1); includes extending 11th Street and constructing at-grade parking and pedestrian grade separation	$33.9	$23.5	$10.4	
	SUNOL GATEWAY				
21112*	Crow Canyon safety improvements	$4.3	$0.9	$3.4	Additional improvements to be funded in Blueprint
98139*	ACE station/track improvements in Alameda County	$48.6	$11.6	$37.0	Asssumes $17 million in state ITIP funding

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RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	TRANSBAY: SAN MATEO-HAYWARD AND DUMBARTON BRIDGES				
21149	Express bus services	$4.0	$0.0	$4.0	
21194*	Dumbarton rail bridge rehabilitation (Alameda County share)	$17.1	$17.1	$0.0	Alameda County share funded through 2000 Measure B sales tax; companion to Santa Clara County project #21792 and San Mateo County project #21618. Operating plan TBD by counties.
	TRI-VALLEY				
21105*	Isabel Avenue/Route 84/I-580 partial interchange construction (Phase 1)	$67.2	$40.2	$27.0	2000 Measure B sales tax project
21113*	Widen Dublin Boulevard from 4 lanes to 6 lanes from Village Parkway to Sierra Court	$4.0	$3.0	$1.0	
21116*	Widen I-580 to add an HOV lane in each direction from west of Tassajara Road in Pleasanton to east of Vasco Road in Livermore (initial segment)	$93.0	$33.0	$60.0	Assumes $60 million in state ITIP funding
21130*	East Dublin/Pleasanton BART Station transit village; includes construction of parking structure	$22.0	$18.7	$3.3	
21133*	New West Dublin/Pleasanton BART Station	$43.0	$34.2	$8.8	
21151	LAVTA satellite maintenance/operations facility	$18.0	$14.0	$4.0	
21885	BART/Tri-Valley Rail Extension (for right-of-way acquisition)	$80.0	$57.0	$23.0	Assumes $7 million from bridge tolls; remaining Track 1 committments included in Regional Transit Expansion Program reserve funding (see Bay Area Region Projects – Track 1)
94024	Auto/truck separation lane at I-580/I-205 interchange	$60.0	$55.0	$5.0	Assumes $5 million in state ITIP funding

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	CONTRA COSTA COUNTY-WIDE		
94553	Local streets and roads pavement maintenance (committed revenues shown)	$515.2	Shortfall remains (see Track 1)
21855	Non-pavement maintenance (sidewalks, lighting, drainage, landscaping, etc.) (committed revenues shown)	$429.3	Shortfall remains
21864	Local bridge maintenance (committed revenues shown)	$92.0	Fully funded
94556	BART (Contra Costa County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements, equipment, fixed facilities and other capital assets; does not include expansion except BART-to-SFO extension)	$4,591.0	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
94557	AC Transit (Contra Costa County) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$829.2	Federal, state and local funds (including transit fares) available directly to operator; capital shortfalls remain (see Track 1)
94558	Central Contra Costa Transit Authority (CCCTA) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$741.9	Federal, state and local funds (including transit fares) available directly to operator
94559	WestCAT and Tri Delta – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$465.3	Federal, state and local funds (including transit fares) available directly to operator
94561	Transit service for elderly and disabled riders	$32.4	Measure C sales tax project
94562	Local street maintenance and improvements; carpools, vanpools, and park-and-ride lots	$210.9	Measure C sales tax project
98629	BART Advanced Automatic Train Control System (county share)	$12.5	
94049	Bicycle and pedestrian projects	$31.4	Funds are from Transportation Development Act (TDA) Article 3, Bicycle Transportation Account, local TEA 21 Enhancement funds, and local sales tax funds.
	DELTA		
21213	Pittsburg/Bay Point BART Station parking & lighting improvements (400 new spaces)	$2.6	
21214	Widen Wilbur Avenue from 2 lanes to 4 lanes from Burlington Northern Santa Fe Railroad to Route 160	$8.5	
21215	Widen Lone Tree Way to 6 lanes from Route 4 Bypass to Fairview Avenue in Brentwood	$6.0	
21216	Extend Laurel Road from Route 4 Bypass to Laurel Road East	$8.0	
21440	Regional Express Bus Program: Brentwood to Pittsburg/Bay Point BART Station	$1.7	2000 Traffic Congestion Relief Program project
21445	Regional Express Bus Program: Route 4/Del Norte BART Station to Martinez Intermodal Station	$1.2	2000 Traffic Congestion Relief Program project
94531	Widen Route 4 to 6 mixed flow lanes and 2 HOV lanes from Bailey Road to Railroad Avenue and restripe from Route 242 to Bailey Avenue for HOV lanes	$28.0	Measure C sales tax project; project is under construction and expected to be operational by August 2001
94538	Route 4 transportation management system	$0.7	

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	DELTA (continued)		
96022	Route 4 Bypass, Phase 1: construct a 4-lane facility from Route 4 to Lone Tree Way and a 2-lane facility from Lone Tree Way to Walnut Boulevard, upgrade Marsh Creek Road and construct a partial freeway-to-freeway interchange 1 mile east of Hillcrest Avenue on Route 4 and partial interchange at Lone Tree Way	$75.0	Funded through local housing fees
98104	Route 4/Railroad Avenue and Loveridge Road interchange improvements and highway widening from Railroad Avenue to Hillcrest Avenue (6 mixed-flow lanes and 2 HOV lanes between Railroad Avenue and Loveridge Road)	$84.0	
98115	Widen Ygnacio Valley/Kirker Pass roads from 4 lanes to 6 lanes from Michigan Boulevard to Cowell Road	$6.0	Other funds from the city of Concord
98190	Widen Route 4 to a 4-lane expressway from I-80 to Cummings Skyway (Phase 1)	$80.4	In Phase 2, expressway will be upgraded to full freeway standards (see Contra Costa County project #94050).
98193	Extend Panoramic Drive from North Concord BART Station to Willow Pass Road	$10.0	100% locally funded
98220	Route 4 Bypass, Segment 1: complete interchanges at Laurel Road and Lone Tree Way	$10.0	Funded through East Contra Costa Regional Fee and Financing Authority
98221	Route 4 Bypass, Segment 2: widen to 4 lanes from Lone Tree Way to Balfour Road	$12.0	Funded through East Contra Costa Regional Fee and Financing Authority
	DIABLO		
21434	Regional Express Bus Program: I-680/Martinez to San Ramon	$4.9	2000 Traffic Congestion Relief Program project
94054	Martinez Intermodal Terminal Facility (Phases 1 and 2); includes construction of a new passenger rail station, bus facilities and parking	$31.3	
94532	Gateway Lamorinda traffic program	$14.8	Measure C sales tax project
98127	I-680/Alcosta Boulevard interchange improvements	$11.8	Other funds from South County and Tri-Valley transportation development fees
98132	Widen and extend Bollinger Canyon Road (6 lanes) from Alcosta Boulevard to Dougherty Road	$4.4	Other funds from developer fees
98134	Widen Dougherty Road to 6 lanes from Red Willow to Contra Costa County line	$45.0	
98135	Construct Windermere Parkway: 4 lanes from Bollinger Canyon Road extension to East Branch	$14.0	Fully funded through developer fees
98136	Construct East Branch: 4 lanes from Bollinger Canyon Road extension to Camino Tassajara	$14.0	Fully funded through developer fees
	EASTSHORE–NORTH		
21430	Regional Express Bus Program: I-80/Richmond Transbay	$2.8	2000 Traffic Congestion Relief Program project
94555	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento, and 7 round trips daily between San Jose and Oakland)	$66.0	Effective October 2001
	TRANSBAY: RICHMOND–SAN RAFAEL BRIDGE		
21432	Regional Express Bus Program: I-80/Richmond Transbay	$5.2	2000 Traffic Congestion Relief Program project

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM†	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	CONTRA COSTA COUNTY-WIDE				
94036	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see commited projects)	$15.6	$0.0	$15.6	
94037	Non-MTS streets and roads pavement rehabilitation of shortfall (see Committed projects)	$150.4	$0.0	$7.5	Remaining shortfall to be funded in Blueprint
94038	AC Transit capital program shortfall (see Committed projects)	$22.6	$0.0	$22.6	County share based on service area and population
94040	BART capital program shortfall (see Committed projects – excludes seismic program)	$125.6	$0.0	$125.6	County share based on population
98550	Transportation for Livable Communities – county program	$20.3	$0.0	$20.3	County share of regional program for community development projects linked to transportation
98559	Surface Transportation Program (STP) planning funds for the county	$6.7	$0.0	$6.7	
21201	BART system operations and capacity improvements (Eastshore-North, Diablo and Delta corridors)	$17.0	$0.0	$17.0	
21203*	Express bus acquisition for commuter bus service	$6.0	$0.0	$6.0	
21204	Ancillary park-and-ride, transit access, express bus enhancements – capital facilities	$6.0	$0.0	$6.0	
21202	Bicycle and pedestrian projects	$20.0	$0.0	$20.0	
	DELTA				
21211	BART/East Contra Costa rail extension (right-of-way acquisition)	$95.0	$33.0	$62.0	Track 1 assumes $42 million from bridge tolls; remaining Track 1 committments included in Regional Transit Expansion Program reserve funding (see Bay Area Region Projects – Track 1)
21212*	Widen eastbound Hillcrest Avenue offramp from 1 lane to 2 lanes and add a Route 4 eastbound auxiliary lane in Antioch	$2.5	$0.0	$2.5	
94046	Non-capacity increasing improvements to interchanges and parallel arterials to Route 4	$8.0	$0.0	$8.0	
94050	Upgrade Route 4 to full freeway from I-80 to Cummings Skyway (Phase 2)	$40.0	$0.0	$40.0	See Contra Costa County project #98190 for Phase 1
98142*	Widen Route 4 from 4 lanes to 8 lanes from Loveridge Road to Somersville Road with HOV lanes	$70.0	$40.0	$30.0	
98999*	Widen Route 4 from 4 lanes to 6 lanes from Somersville Road to Route 160 with reversible HOV lane in median (interim project)	$130.0	$65.0	$65.0	
98222	Route 4 Bypass, Segment 1: Route 160 freeway-to-freeway connectors to and from the north	$12.0	$6.0	$6.0	
98198*	Vasco Road safety improvements (includes Alameda County portion)	$13.0	$10.5	$2.5	Scope to be determined by study to be conducted by Contra Costa Transportation Authority and Alameda County Congestion Management Agency

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		In millions of 2001 dollars			
	DIABLO				
21205*	I-680/Route 4 interchange freeway-to-freeway direct connectors (Phases 1 and 2): eastbound Route 4 to southbound I-680, and northbound I-680 to westbound Route 4	$50.0	$5.0	$45.0	
21206	Caldecott Tunnel fourth bore	$185.0	$36.0	$149.0	Assumes $129 million in state ITIP funding
21207*	Martinez Intermodal Terminal Facility (Phase 3 initial segment): 200 interim parking spaces (includes site acquisition, demolition and construction)	$6.0	$0.0	$6.0	Phases 1 and 2 are fully funded; assumes $4 million in State ITIP funding; remaining phases (ferry facilities, auto/pedestrian bridges) in Blueprint
94051*	I-680 auxiliary lane from Bollinger Canyon Road to Diablo Road in San Ramon and Danville	$47.5	$22.4	$25.1	Measure C sales tax project (partial funding); Phase 1 (Diablo Road to Sycamore Valley Road) funded in State Transportation Improvement Program
94052*	I-680 HOV lanes from Marina Vista interchange to North Main Street (southbound) and from Route 242 northbound to the Marina Vista interchange	$54.5	$45.2	$9.3	Measure C sales tax project
98126	Non-capacity increasing improvements to interchanges and parallel arterials to I-680 and Route 24	$8.0	$0.0	$8.0	
98130*	Widen Alhambra Avenue from Route 4 to McAlvey Drive (Phases 2 and 3)	$12.8	$0.0	$12.8	
98133*	Widen Pacheco Boulevard from 2 lanes to 4 lanes from Blum Road to Arthur Road	$8.3	$2.8	$5.5	Other funds from Tosco refinery to mitigate closure of Solano Way
98194*	Extend Commerce Avenue to Willow Pass Road	$4.7	$2.1	$2.6	
98196*	Route 24 eastbound auxiliary lanes from Gateway Boulevard to Brookwood Road/Moraga Way in Orinda	$6.0	$1.5	$4.5	
	EASTSHORE-NORTH				
21208*	Richmond Parkway Transit Center (Phase 1): includes signal reconfiguration/timing, new 700–800 space parking facility, and security improvements at Hilltop park-and-ride lot	$15.0	$0.0	$15.0	Assumes $6 million in state ITIP funding
21209*	Hercules Transit Center relocation and expansion	$6.0	$4.0	$2.0	
21210*	Capitol Corridor train station in Hercules	$9.0	$3.0	$6.0	2000 Traffic Congestion Relief Program project
94045*	New express buses for I-80 HOV service (capital costs)	$16.9	$0.0	$16.9	Needs operating funds
94047	Extend I-80 westbound HOV lane from north of Cummings Skyway to Route 4	$30.0	$0.0	$30.0	Assumes $25 million in state ITIP funding
94048	Non-capacity increasing improvements to interchanges and parallel arterials to I-80	$10.8	$0.0	$10.8	
98157*	AC Transit enhanced bus service in San Pablo Avenue corridor in Contra Costa County: new passenger stations, roadway geometric improvements, information kiosks	$8.5	$0.0	$8.5	Needs operating funds for more frequent service
98197*	Richmond intermodal transfer station (BART to Amtrak/Capitol Corridor)	$23.6	$17.8	$5.7	

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		In millions of 2001 dollars	
	MARIN COUNTY-WIDE		
98511	Local streets and roads pavement maintenance (committed revenues shown)	$75.0	Shortfall remains (see Track 1)
21856	Non-pavement maintenance (sidewalks, lighting, drainage, landscaping, etc.) (committed revenues shown)	$222.8	Shortfall remains (see Track 1)
21865	Local bridge maintenance (committed revenues shown)	$14.6	Shortfall remains (see Track 1)
94572	Golden Gate Transit (Marin County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include expansion)	$1,680.7	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
94063	Bicycle and pedestrian projects	$8.1	Funds are from Transportation Development Act (TDA) Article 3, Bicycle Transportation Account, and local TEA 21 Enhancement funds.
	GOLDEN GATE		
21887	Tennessee Valley (Coyote Creek) Bridge replacement	$0.8	Funded as TEA 21 demonstration project
21888	Redwood Landfill overcrossing	$3.5	100% locally funded
21889	Regional Express Bus Program: US 101/Santa Rosa to San Rafael/San Francisco	$0.4	2000 Traffic Congestion Relief Program project
94563	US 101 HOV lanes from North San Pedro Road to Lucky Drive in San Rafael	$78.9	
94566	US 101/Lucas Valley Road interchange improvements in San Rafael	$0.5	100% locally funded; later phases in Marin County project #21306 and Blueprint
98182	Sir Francis Drake Boulevard improvements	$3.5	
98200	Sonoma-Marin Rail station site acquisitions/upgrades	$0.6	Funding is from federal earmarks for multimodal stations; cost identified represents only right-of-way acquisition costs.

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	MARIN COUNTY-WIDE				
94055	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall	$11.6	$0.0	$11.6	
94056	Non-MTS streets and roads pavement rehabilitation shortfall (see Committed projects)	$63.4	$0.0	$31.9	Remaining shortfall to be funded in Blueprint
98504	Local streets and roads non-pavement maintenance shortfall (see Committed projects)	$129.9	$0.0	$1.3	Remaining shortfall to be funded in Blueprint
98525	Seismic retrofit and upgrade of local bridges and overpasses shortfall	$3.2	$0.0	$3.2	
21301	Golden Gate Transit capital program shortfall (see Committed projects)	$113.7	$0.0	$113.7	
98551	Transportation for Livable Communities – county program	$5.0	$0.0	$5.0	County share of regional program for community development projects linked to transportation
98560	Surface Transportation Program planning funds for the county	$1.6	$0.0	$1.6	
21322	Travel Demand Management Program	$2.5	$0.0	$2.5	
21302	Bicycle and pedestrian projects (from Countywide Master Plan)	$2.4	$0.0	$2.4	Additional projects to be funded in Blueprint
	GOLDEN GATE				
21303	Local Marin bus service enhancements (capital only)	$41.9	$10.0	$31.9	Additional enhancements to be funded in Blueprint
21304*	Freeway-to-freeway interchange improvements; includes new bridge West I-580 to South US 101 and new lane West I-580 to North US 101 to 2nd Avenue	$8.3	$0.0	$8.3	Assumes $5 million in state ITIP funding; remaining phases to be funded in Blueprint
21305*	US 101/Tamalpais interchange improvements	$0.3	$0.0	$0.3	Remaining phases to be funded in Blueprint
21306*	US 101/Lucas Valley Road interchange improvements	$4.0	$3.0	$1.0	Remaining phases to be funded in Blueprint
21307*	US 101/Atherton interchange improvements: signal-ize Atherton Avenue/Binford Road intersection	$0.6	$0.3	$0.3	Initial phase in Marin County project #94566; remaining phases to be funded in Blueprint
21308*	Expand Manzanita park-and-ride lot	$10.7	$4.7	$6.0	Assumes $5 million in state ITIP funding; remaining phases to be funded in Blueprint
98154	Widen US 101 from 4 lanes to 6 lanes (including 2 HOV lanes) from Route 37 to the Sonoma County line and convert some portions from expressway to freeway	$117.4	$17.4	$100.0	Between Atherton Avenue and Route 37, project widens US 101 from 6 to 8 lanes; assumes $90 million in state ITIP funding; companion to Sonoma County project #98147
98178*	US 101/Sir Francis Drake Boulevard improvements (environmental study only)	$1.8	$0.0	$1.8	Remaining phases to be funded in Blueprint
98179*	US 101/TiburonBoulevard interchange improve-ments: widen southbound offramp	$1.8	$0.8	$1.0	Remaining phases to be funded in Blueprint
	NORTH BAY EAST-WEST				
98146	Route 37 traveler information system	$0.3	$0.0	$0.3	Improvements identified in the North Bay Corridor Study

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	NAPA COUNTY-WIDE		
94576	Local streets and roads pavement maintenance (committed revenues shown)	$116.9	Shortfall remains (see Track 1)
21857	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$137.8	Shortfall remains
21871	Local bridge maintenance (committed revenues shown)	$20.6	Shortfall remains
94578	Napa County Transit – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$159.2	Federal, state and local funds (including transit fares) available directly to operator
94067	Traffic Operations System improvements in Napa Valley	$0.5	
94077	Bicycle and pedestrian projects	$4.3	Funds are from Transportation Development Act Article 3, Bicycle Transportation Account, and local TEA 21 Enhancement funds.
	NAPA VALLEY		
21419	Ancillary park-and-ride, intermodal facilities, transit access, express bus enhancements — capital facilities	$6.0	
94070	Transit Service Center in the city of Napa and operational improvements for existing transit programs	$2.0	
94071	Replace Napa River (Maxwell) Bridge and widen from 2 lanes to 4 lanes on Route 121 over the Napa River in the city of Napa	$29.0	
94076	Trancas intermodal facility in the city of Napa	$0.8	Environmental studies under way
94575	Route 29: Redwood/Trancas Road interchange construction	$53.0	

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	NAPA COUNTY-WIDE				
94064	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$8.4	$0.0	$8.4	Fully funded
94065	Non-MTS streets and roads pavement rehabilitation shortfall (see Committed projects)	$95.8	$0.0	$18.5	Remaining shortfall to be funded in Blueprint
98552	Transportation for Livable Communities — county program	$2.9	$0.0	$2.9	County share of regional program for community development projects linked to transportation
98561	Surface Transportation Program planning funds for the county	$1.0	$0.0	$1.0	
	NAPA VALLEY				
21402	Napa-to-Fairfield fixed-route transit (capital costs)	$1.8	$0.0	$1.8	Operating funds from existing sources
21403	Non-capacity increasing operational improvements to MTS and non-MTS streets and roads network in Napa Valley	$4.5	$0.0	$4.5	
94072	Widen First Street overcrossing on Route 29 from 2 lanes to 4 lanes in the city of Napa	$3.3	$0.0	$3.3	
	NORTH BAY EAST-WEST				
21401	Route 29/12/121 (Stanly Ranch) intersection improvements	$11.0	$0.0	$11.0	
94073*	Route 12/29/221 (Soscol Avenue) intersection improvements	$19.9	$2.1	$17.8	
94074	Widen Route 12 (Jameson Canyon) from I-80 in Solano County to Route 29 in Napa County from 2 lanes to 4 lanes (Napa County portion of project)	$41.6	$2.8	$38.8	Assumes $28.8 million in state ITIP funding; companion to Solano County project #94152.
94075*	Route 12/29 (Airport Road) grade separation	$28.4	$1.5	$26.9	

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SAN FRANCISCO COUNTY-WIDE		
94627	Local streets and roads pavement maintenance (committed revenues shown – includes sales tax revenues from San Francisco County project #94623)	$198.3	Shortfall remains (see Track 1)
21858	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$151.4	Shortfall remains
21866	Local bridge maintenance (committed revenues shown)	$34.7	Fully funded
94635	BART (San Francisco County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements, equipment, fixed facilities and other capital assets; does not include expansion except BART-to-SFO extension)	$3,982.0	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
94636	San Francisco Municipal Railway – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$14,418.7	Federal, state and local funds (including transit fares) available directly to operator; capital and operating shortfalls remain (see Track 1)
21350	Remove US 101 Central Freeway structure	$11.7	Funded by State Highway Operation and Protection Program (SHOPP)
94621	US 101 Central Freeway reconstruction due to earthquake damage	$100.0	Assumed funding from the State Highway Operation and Protection Program and land parcel sales
94625	Bernal Heights street system upgrade	$7.0	Sales tax project
94632	Third Street light-rail transit extension to Bayview Hunters Point (initial operating segment)	$530.0	Under construction
94637	Expansion of paratransit door-to-door van and taxi service to comply with Americans With Disabilities Act (ADA)	$61.0	Sales tax project
94623	Street resurfacing and reconstruction	$73.4	Sales tax project
94624	Traffic signals and signs	$67.0	Sales tax project
98593	Integrated Traffic Management System	$7.0	
94639	Ridesharing and transit promotion	$6.0	Sales tax project
98630	BART Advanced Automatic Train Control System (county share)	$8.0	
94090	Bicycle and pedestrian projects	$25.8	Funds are from Transportation Development Act Article 3, Bicycle Transportation Account, local TEA 21 Enhancement funds, and sales tax funds.
21422	Design and engineering study for Treasure Island ferry terminal	$1.5	
21549	South Basin Bridge (environmental study only)	$9.4	Full amount of TEA 21 earmark
21573	Muni F-Embarcadero extension	$14.4	

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	GOLDEN GATE		
21353	Golden Gate Transit (San Francisco County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include expansion)	$152.8	Federal, state and local funds (including transit fares) available directly to operators; capital shortfall remains (see Track 1)
21890	Regional Express Bus Program: US 101/Santa Rosa to San Rafael/San Francisco	$0.2	2000 Traffic Congestion Relief Program project
98102	Doyle Drive environmental study	$10.2	Funded by federal Section 204 funds
	PENINSULA		
21537	Caltrain Express service between San Francisco and San Jose, includes passing tracks and rolling stock (Phase 1) (San Francisco County portion only)	$42.3	Fully funded through 2000 Traffic Congestion Relief Program; cost of project divided equally among the three Joint Powers Board counties (San Francisco, San Mateo and Santa Clara)
94634	Caltrain (San Francisco County share) transit operating and capital improvement program (including replacement, rehabilitation, and system enhancements for rolling stock, equipment, fixed facilities and other capital assets). Station improvements (e.g., platforms) are included.	$799.5	Federal, state and local funds (including transit fares) available directly to operator; revenues divided equally among the three Joint Powers Board counties; capital shortfall remains (see Track 1)

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SAN FRANCISCO COUNTY-WIDE				
94078	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$21.9	$0.0	$21.9	
21548	Non-MTS streets and roads pavement rehabilitation shortfall	$124.1	$0.0	$4.0	Remaining shortfall to be funded in Blueprint
21505	Local bridge seismic work	$5.0	$0.0	$5.0	
94079	BART capital replacement program shortfall (see Committed projects – excludes seismic program)	$108.9	$0.0	$108.9	County share based on population
94080	Muni capital replacement program shortfall (see Committed projects)	$100.1	$0.0	$100.1	
98553	Transportation for Livable Communities – county program	$13.3	$0.0	$13.3	County share of regional program for community development projects linked to transportation
98562	Surface Transportation Program planning funds for the county	$4.4	$0.0	$4.4	
	GOLDEN GATE				
94089*	Doyle Drive replacement – US 101 south of the Golden Gate Bridge	$420.0	$324.0	$96.0	Track 1 assumes $28.0 million in state ITIP funding and $60 million in Federal Public Lands Highway funding. "Existing Funding" includes a San Francisco general fund commitment of $60 million that would be replaced with local sales tax funds if a rollover of San Francisco's sales tax measure is approved.
21354	Golden Gate Transit (San Francisco County share) capital replacement program shortfall (see Committed projects)	$10.3	$0.0	$10.3	
	PENINSULA				
21342	Caltrain Downtown Extension/ Transbay Terminal Replacement	$1,885.0	$1,600.0	$285.0	Reflects total costs and revenues. "Existing Funding" assumes $27 million in local sales tax funding from San Mateo County; Track 1 assumes $23 million from San Francisco (San Francisco will explore contributions from other counties benefiting from extension/terminal), $203 million from bridge tolls and $59 million from ITIP
21509*	Caltrain electrification from San Francisco to Gilroy	$602.0	$440.0	$162.0	Reflects total costs and revenues; Track 1 assumes at least $47 million from San Francisco, $65 million in ITIP and $50 million in CARB/AB 434 funds; final distribution of revenues among the JPB counties, subject to negotiation by the JPB
94085	Caltrain capital replacement program shortfall (San Francisco County share)	$47.9	$0.0	$47.9	Cost of project divided equally among the three Joint Powers Board counties

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RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SAN FRANCISCO				
21501	Bicycle projects and programs	$4.0	$0.0	$4.0	
21502	Pedestrian projects and programs	$4.0	$0.0	$4.0	
21503	Traffic calming	$4.0	$0.0	$4.0	
21504	Traffic signals and signs	$2.0	$0.0	$2.0	
21506*	Integrated Traffic Management System	$4.0	$0.0	$4.0	
21507	Transit enhancements	$8.0	$0.0	$8.0	
21508	Bus Rapid Transit Program	$26.0	$0.0	$26.0	
21510*	Third Street light-rail transit extension to Chinatown (Central Subway)	$647.0	$140.0	$507.0	Assumes $432 million from federal discretionary Section 5309 New Starts funding; 2000 Traffic Congestion Relief Program project
21544*	Balboa Park BART Station expansion (planning phase only)	$2.4	$0.4	$2.0	Assumes $2 million in state ITIP funding; 2000 Traffic Congestion Relief Program project

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SAN MATEO COUNTY-WIDE		
94662	Local streets and roads pavement maintenance (committed revenues shown)	$359.5	Shortfall remains (see Track 1)
21859	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$350.3	Shortfall remains
21867	Local bridge maintenance (committed revenues shown)	$46.3	Shortfall remains
94666	SamTrans – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$2,894.1	Federal, state and local funds (including transit fares) available directly to operator
94667	SamTrans Americans With Disabilities (ADA) services	$737.7	Measure A sales tax project
98631	BART Advanced Automatic Train Control System (county share)	$4.2	
94101	Bicycle and pedestrian projects	$27.1	Funds are from Transportation Development Act Article 3, Bicycle Transportation Account, and local TEA 21 Enhancement funds.
	PENINSULA		
21876	BART (San Mateo County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements, equipment, fixed facilities and other capital assets; does not include expansion except BART-to-SFO extension)	$1,528.6	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
21336	Widen Airport Boulevard from 2 lanes to 4 lanes	$2.6	
21337	Widen Airport Boulevard bridge (14-foot widening of existing bridge structure)	$0.9	
21340	Extend Hickey Boulevard to construct 2-lane road between Mission Road and Hillside Boulevard in Colma	$1.9	
21349	US 101 interchange improvements and ramp metering at Ralston Avenue, Hillsdale Boulevard, and Millbrae Avenue	$14.4	
21351	Widen John Daly overcrossing at junction I-280 and Route 1	$2.8	
21352	Replace San Pedro Creek Bridge and road approaches	$1.5	
21439	Regional Express Bus Program: Route 82/El Camino Express, Daly City BART Station to Palo Alto	$4.9	2000 Traffic Congestion Relief Program project
21574	San Mateo Downtown Transit Center	$6.9	
21605	US 101/Oyster Point Boulevard interchange improvements (Phases 2 and 3)	$40.0	
21609	I-280/I-380 local access improvements	$5.0	
21617	Caltrain Express service between San Francisco and San Jose; includes passing tracks and rolling stock (Phase 1)	$42.3	Fully funded through 2000 Traffic Congestion Relief Program; cost of project divided equally among the three Joint Powers Board counties (San Francisco, San Mateo and Santa Clara).
21622	Caltrain local station improvements	$63.2	

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS In millions of 2001 dollars	NOTES
	PENINSULA (continued)		
21626	Caltrain grade separations (to be determined)	$113.0	
21892	Widen Route 84 from 4 lanes to 6 lanes from El Camino Real to Broadway	$7.5	
21893	Route 92 between Half Moon Bay city limits and Pilarcitos Creek alignment and shoulder improvements	$2.6	
21897	Modify and interconnect existing traffic signals from Davey Glen Road to 41st Avenue and 31st Avenue to Millbrae	$5.8	Funded by State Highway Operation and Protection Program (SHOPP)
94100	US 101 auxiliary lanes from Marsh Road to Route 92	$59.9	Measure A sales tax project
94105	BART-to-San Francisco International Airport (SFO) extension	$1,482.4	Project is under construction.
94643	Widen Route 92 between Route 1 and Half Moon Bay city limits	$16.6	Includes adding eastbound and westbound lanes.
94644	Route 92 westbound slow vehicle lane between Route 35 and I-280	$32.0	
94656	Upgrade Route 1 (Devil's Slide Tunnel)	$150.0	To be funded through federal Emergency Relief funds.
94664	Caltrain (San Mateo County share) transit operating and capital improvement program (including replacement, rehabilitation, and system enhancements for rolling stock, equipment, fixed facilities and other capital assets). Station improvements (e.g., platforms) are included.	$799.5	Federal, state and local funds (including transit fares) available directly to operator; revenues divided equally among the three Joint Powers Board counties; capital shortfall remains (see Track 1)
98204	Construct Route 1 northbound and southbound lanes from Fassler Avenue to Westport Drive in Pacifica	$6.5	

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SAN MATEO COUNTY-WIDE				
94093	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$8.8	$0.0	$8.8	
98501	Non-MTS streets and roads pavement rehabilitation shortfall	$107.3	$0.0	$88.0	Remaining shortfall to be funded in Blueprint
98554	Transportation for Livable Communities – county program	$13.1	$0.0	$13.1	County share of regional program for community development projects linked to transportation
98563	Surface Transportation Program planning funds for the county	$8.8	$0.0	$8.8	
21624	Transit-Oriented Development Incentives Program	$31.3	$0.0	$31.3	
	PENINSULA				
21343	Caltrain Downtown Extension/Transbay Terminal Replacement	$1,885.0	$1,600.0	$285.0	Reflects total costs & revenues. "Existing Funding" assumes $27 million in local sales tax funding from San Mateo County; Track 1 assumes $23 million from San Francisco (San Francisco will explore contributions from other counties benefiting from extensions/terminal), $203 million from bridge tolls and $59 million from ITIP
21602*	US 101/Broadway interchange reconstruction	$57.5	$15.0	$42.5	
21603*	US 101/Woodside Road interchange improvements	$67.0	$7.0	$60.0	
21604	US 101 auxiliary lanes from Sierra Point to San Francisco County line	$3.3	$1.7	$1.6	
21606*	US 101/ Willow Road interchange reconstruction	$24.5	$12.5	$12.0	
21607*	US 101/University Avenue interchange reconstruction	$35.3	$3.0	$32.3	
21608*	US 101 auxiliary lanes from Marsh Road to Santa Clara County line	$32.6	$16.6	$16.0	
21610*	US 101 auxiliary lanes from San Bruno Avenue to Grand Avenue	$12.3	$6.3	$6.0	
21627*	Caltrain electrification from San Francisco to Gilroy	$602.0	$440.0	$162.0	Reflects total costs and revenues; Track 1 assumes at least $47 million from San Francisco, $65 million in ITIP and $50 million in CARB/AB 434 funds; final distribution of revenues among the JPB counties subject to negotiation by the JPB

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RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	PENINSULA (continued)				
21632	Route 92 from US 101 to I-280: add westbound passing lane	$81.6	$0.0	$81.6	
98176*	US 101 auxiliary lanes from Third Avenue to Millbrae and US 101/Peninsula Avenue interchange reconstruction	$87.0	$60.9	$26.1	Assumes $15 million in state ITIP funding
98567	BART capital program shortfall – see Committed projects (excludes seismic program and replacement of rehabilitated A/B cars)	$41.8	$0.0	$41.8	County share based on population
98568	Caltrain capital replacement program shortfall (San Mateo County share) – see Committed projects	$47.9	$26.0	$21.9	Cost of project divided equally among the three Joint Powers Board counties; local funding commitment from county transportation sales tax measure consistent with Countywide Plan.
	TRANSBAY: SAN MATEO-HAYWARD AND DUMBARTON BRIDGES				
21618*	Dumbarton rail bridge rehabilitation (San Mateo County share)	$71.9	$60.0	$11.9	Assumes $11.9 million in state ITIP funding; San Mateo share funded through Measure A; companion to Alameda County project #21194 and Santa Clara County project #21792. Operating plan TBD by counties.

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SANTA CLARA COUNTY-WIDE		
94609	Local streets and roads pavement maintenance (committed revenues shown)	$972.0	Shortfall remains (see Track 1)
21860	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$1,494.5	Shortfall remains (see Track 1)
21868	Local bridge maintenance	$99.1	Fully funded
94610	VTA – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets. Does not include system expansion)	$10,743.5	Federal, state and local funds (including transit fares) available directly to operator; surplus remains
94109	Traffic Operations System (TOS) improvements on Route 237 and I-880	$0.3	
94125	Bicycle and pedestrian projects	$75.3	Funds are from Transportation Development Act Article 3, Bicycle Transportation Account, and local TEA 21 Enhancement funds.
	FREMONT-SOUTH BAY		
21444	Regional Express Bus Program: I-680/Fremont BART Station to Silicon Valley	$6.0	2000 Traffic Congestion Relief Program project
94134	I-880/Route 237 interchange improvements; includes southbound I-880 to westbound Route 237 and eastbound Route 237 to northbound I-880 (Stages A & B)	$84.3	Under construction; to be completed in 2002
96017	Widen I-880 from 4 lanes to 6 lanes from Montague Expressway to US 101	$60.4	1996 Measure B sales tax project
98138	Acquisition of railroad corridor for future Silicon Valley Rapid Transit Corridor project	$80.0	1996 Measure B sales tax project and Traffic Congestion Relief Program project
98172	I-880/Route 237 interchange improvements (freeway-to-freeway HOV connector) and eastbound Route 237 to southbound I-880 ramp to Tasman Drive	$46.0	1996 Measure B sales tax project
98209	Reconstruct I-880/Dixon Landing Road interchange and widen I-880 from 8 to 10 lanes (includes 2 HOV lanes) from Route 237 to the Alameda County line	$80.0	
	PENINSULA		
21762	Caltrain Express service between San Francisco and San Jose, includes passing tracks and rolling stock (Phase 1) (Santa Clara County portion)	$42.3	Fully funded through 2000 Traffic Congestion Relief Program; cost of project divided equally among the three Joint Powers Board counties (San Francisco, San Mateo, and Santa Clara)
21768	Caltrain local station improvements	$110.0	
94613	Caltrain (Santa Clara County portion) transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$799.5	Federal, state and local funds (including transit fares) available directly to operator; revenues divided equally among the three Joint Powers Board counties; capital shortfall remains (see Track 1)

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS In millions of 2001 dollars	NOTES
	SILICON VALLEY		
20001	US 101/Bailey Avenue interchange improvements	$45.0	Funded through local and state funds
20002	Route 85 noise mitigation	$9.3	1996 Measure B sales tax project
21721	10th Street (Route 152)/US 101 interchange improvements in Gilroy	$6.0	
21729	Mary Avenue bicycle and pedestrian overcrossing at I-280	$3.7	Feasibility study is under way
21730	Los Gatos Creek Trail from Lincoln Avenue to San Fernando Street	$2.0	
21731	Los Gatos Creek Trail from San Fernando Street to Santa Clara Street	$3.0	
21732	Stevens Creek Trail, Reach 4 North (Yuba Drive to El Camino Real underpass to North Meadow)	$2.7	
21733	Uvas Creek Class 1 Trail connection to Gilroy Sports Park (Phases 1 and 2 from Thomas Road Bridge to Gilroy Sports Park)	$0.5	
21734	Extend Los Gatos Creek Trail on east side from Mozart Avenue to San Tomas Expressway	$0.8	
21735	San Tomas Aquino/Saratoga Creek Trail from Route 237 to Santa Clara south city limit	$0.0	
21736	San Tomas Aquino/Saratoga Creek Trail from Tantau to Barnhart	$0.5	
21737	Borregas Avenue bicycle and pedestrian overcrossings at US 101 and Route 237	$4.7	
21738	West Little Llagas Creek bicycle and pedestrian pathway from Spring Road to Watsonville Road	$1.5	
21739	Union Pacific bicycle and pedestrian overcrossing from Gibraltar Court to Montague Expressway	$3.0	
21740	Bernardo Avenue undercrossing at Caltrain railroad tracks	$1.3	
21741	Bike and pedestrian improvements on Hamilton Avenue from Salmar to Creekside (Route 17)	$1.5	
21742	River Oaks Parkway bike and pedestrian bridge at Guadalupe River	$1.0	
21743	Bicycle improvements on Almaden Expressway between Ironwood Drive and Koch Lane (southbound only)	$2.0	
21744	Santa Clara Caltrain bike and pedestrian overcrossing for Intermodal Transit Center	$2.0	
21745	De Anza Trail	$2.0	
21746	Cox Avenue/Southern Pacific railroad intersection improvements; includes improvements to grade crossings and bicycle paths	$0.1	
21747	California Avenue bicycle and pedestrian undercrossing at Caltrain station	$5.0	
21760	Double track Caltrain between San Jose and Gilroy	$170.0	2000 Measure A sales tax and 2000 Traffic Congestion Relief Program project

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SILICON VALLEY (continued)		
21770	Caltrain extension to Salinas/Monterey (capital funds)	$36.0	2000 TCRP project
21785	US 101/Blossom Hill Avenue interchange modifications	$10.0	100% locally funded
21786	US 101/Hellyer Avenue interchange modifications	$10.0	100% locally funded
21787	Palo Alto Intermodal Transit Center (Phase I)	$50.0	
21924	Extend Vasona LRT from Winchester to Vasona Junction in Los Gatos	$40.0	2000 Measure A sales tax project
21788	Zero emission vehicles and facilities for VTA bus fleet	$200.0	
21790	Altamont Commuter Express upgrade	$46.0	
21791	Downtown to East Valley: Light Rail and Bus Rapid Transit Phases 1 and 2	$518.0	2000 Measure A sales tax project
21794	Bus Rapid Transit corridor: El Camino Real (Line 22)	$30.0	2000 Measure A sales tax project
21797	Route 17 bus service improvements	$2.0	2000 Measure A sales tax project
21830	Expressway signal synchronization program	$25.4	1996 Measure B sales tax project
21831	Montague Expressway level-of-service improvements: US 101 to De la Cruz Boulevard HOV lanes	$3.3	1996 Measure B sales tax project (partial funding)
21832	Central Expressway level-of-service improvements: Bowers Avenue to De la Cruz Boulevard	$2.9	1996 Measure B sales tax project (partial funding)
21833	Almaden Expressway level-of-service improvements: Blossom Hill Road to Branham Lane	$2.0	1996 Measure B sales tax project (partial funding)
21834	San Tomas Expressway level-of-service improvements at Campbell Avenue	$1.0	1996 Measure B sales tax project
21836	San Tomas Expressway level-of-service improvements at Hamilton Avenue	$1.1	
21837	Capitol Expressway level-of-service improvements at McLaughlin Avenue	$0.5	
21838	Foothill Expressway level-of-service improvements at various locations	$2.0	
21922	San Jose International Airport connections to Guadalupe LRT	$200.0	2000 Measure A sales tax project
21923	Bus Rapid Transit corridor: Stevens Creek Boulevard	$30.0	2000 Measure A sales tax project
94112	Smart Corridor signal synchronization program; includes extending system north and south	$8.0	
94117	Transit centers and park-and-ride lots	$10.0	
94124	Route 87 HOV lanes from Julian Street to I-280 and from I-280 to Route 85	$61.8	1996 Measure B sales tax project
94135	Study to re-align Route 152 from Route 156 to US 101 (Santa Clara County portion)	$7.0	Funded from state ITIP
94137	Widen US 101 from 4 lanes to 6 lanes from Metcalf Road in South San Jose to Cochrane Road in Morgan Hill	$48.0	1996 Measure B sales tax project

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS (In millions of 2001 dollars)	NOTES
	SILICON VALLEY (continued)		
94587	Widen Guadalupe Expressway (Route 87) from 4-lane expressway to 6-lane freeway, including 2 HOV lanes from US 101 to Julian Street in downtown San Jose	$226.0	
94589	Complete Route 85/87 interchange and connector ramps in San Jose	$51.0	1996 Measure B sales tax project
94592	Route 85/US 101 interchange improvements in Mountain View; includes northbound and southbound HOV direct connectors	$145.0	1996 Measure B sales tax project
21756	Widen US 101 from 6 lanes to 8 lanes (HOV lanes) from Metcalf Road to Cochrane Road	$16.0	
94617	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0	Effective October 2001.
96002	Route 152 safety improvements from Uvas Creek to Route 156 near Gilroy	$11.0	
96019	Tasman Corridor East light-rail extension from North First Street to Hostetter Road	$271.3	1996 Measure B sales tax project; assumes availability of operating funds
98103	Route 17 improvements between Campbell and Los Gatos	$51.0	1996 Measure B sales tax project
98118	Capitol Corridor light-rail extension along Capitol Avenue from just south of Hostetter Road to Wilbur Avenue north of Capitol Expressway	$136.3	1996 Measure B sales tax project; assumes availability of operating funds
98119	Vasona Corridor light-rail extension from downtown San Jose to Winchester Boulevard in Campbell	$283.4	1996 Measure B sales tax project
98121	Increase Caltrain service from San Jose to Gilroy; includes Caltrain corridor facilities and service improvements	$136.7	1996 Measure B sales tax and 2000 Traffic Congestion Relief Program project
98171	Complete Route 85 and US 101 interchange and connector ramps in South San Jose and widen US 101 to 8 lanes from Bernal Road to Metcalf Road	$59.0	1996 Measure B sales tax project; provides connections from southbound US 101 to northbound Route 85
98201	100 low-floor light-rail vehicles: 50 new vehicles and 50 replacement vehicles	$270.0	1996 Measure B sales tax project; assumes availability of operating funds
98849	Route 152 safety and operational improvements between US 101 and Ferguson Road	$16.7	1996 Measure B sales tax project
21421	Expand Guadalupe light-rail vehicle maintenance facility	$9.7	
	SUNOL GATEWAY		
98140	I-680 Sunol Grade southbound and northbound HOV lanes, ramp metering and auxiliary lane from Route 84 to Route 237 (possible value pricing project)	$125.0	Companion to Alameda County project #98141
98151	Planning study and preliminary engineering for connector between I-880 and I-680	$2.5	

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SANTA CLARA COUNTY-WIDE				
94106	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$6.1	$0.0	$6.1	
94107	Non-MTS streets and roads pavement rehabilitation shortfall and local streets and roads projects	$168.3	$0.0	$168.3	
98508	Local streets and roads non-pavement maintenance shortfall	$268.3	$0.0	$11.7	Remaining shortfall to be funded in Blueprint
98555	Transportation for Livable Communities – county program	$33.3	$0.0	$33.3	County share of regional program for community development projects linked to transportation
98564	Surface Transportation Program (STP) planning funds for the county	$11.0	$0.0	$11.0	
21755	VTA Transportation Systems Operations and Management Program	$40.0	$0.0	$40.0	
21750	VTA Landscape Restoration and Graffiti Removal Program	$16.0	$0.0	$16.0	
21754	VTA Soundwall Program	$30.0	$0.0	$30.0	
21748	Santa Clara Countywide Bicycle Program (Tier 2 and beyond)	$48.0	$25.0	$23.0	
	FREMONT-SOUTH BAY				
21713	Route 237 westbound auxiliary lanes between Coyote Creek Bridge and North First Street	$15.0	$0.0	$15.0	
21921*	BART extension from Warm Springs to San Jose	$3,710.0	$2,876.0	$834.0	Track 1 funds from federal discretionary Section 5309 New Starts
	PENINSULA				
21877	Caltrain capital replacement program shortfall (Santa Clara County share) – see Committed projects	$47.9	$47.9	$0.0	Cost of project divided equally among the three Joint Powers Board counties; fully funds program
21769*	Caltrain electrification from San Francisco to Gilroy	$602.0	$440.0	$162.0	Funded through 2000 Measure A sales tax; reflects total costs and revenues; Track 1 assumes at least $47 million from San Francisco, $65 million in ITIP and $50 million in CARB/AB 434 funds; final distribution of revenues among the JPB counties subject to negotiation by the JPB
21344	Caltrain Downtown Extension/Transbay Terminal Replacement	$1,885.0	$1,600.0	$285.0	Reflects total costs and revenues; "Existing Funding" assumes $27 million in local sales tax funding from San Mateo County; Track 1 assumes $23 million from San Francisco. (San Francisco will explore contributions from other counties benefiting from extensions/terminal), $203 million from bridge tolls and $59 million from ITIP

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[2] **Track 1 Funds** refers to discretionary state and federal funds anticipated to be available over the long term of the RTP (and not already programmed in "Existing Funding").

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SILICON VALLEY				
21702*	US 101/Buena Vista Avenue interchange construction	$30.0	$0.0	$30.0	
21703*	I-880/Coleman Avenue interchange improvements	$60.0	$5.0	$55.0	
21706	US 101/Fourth Street/Zanker Road overcrossing and ramp modifications	$50.0	$0.0	$50.0	
21707	I-280/I-680 connector to southbound US 101: new grade-separated ramp with Tully Road exit ramp	$25.0	$0.0	$25.0	
21708	Grade-separate Route 85 northbound to I-280 northbound and I-280 exit to Foothill Expressway ramps	$40.0	$0.0	$40.0	
21712*	Montague Expressway/San Tomas Expressway/ US 101/Mission College Boulevard interchange improvements	$10.0	$0.0	$10.0	
21714*	Route 25/Santa Teresa Boulevard/US 101 interchange construction	$75.0	$0.0	$75.0	Assumes $45 million in state ITIP funding
21715*	Additional Route 152 safety improvements between US 101 and Route 156 (may include a westbound Route 152 to westbound Route 156 flyover)	$10.0	$0.0	$10.0	
21716	Widen Route 237 for HOV lanes between Route 85 and US 101	$40.0	$0.0	$40.0	
21717*	Upgrade Route 25 to 4-lane expressway standards (Santa Clara County portion of project)	$50.0	$0.0	$50.0	Assumes $30 million in state ITIP funding
21718	Widen Route 85 from I-280 to Fremont Avenue	$15.0	$0.0	$15.0	
21719*	I-880/Stevens Creek Boulevard interchange improvements	$10.0	$0.0	$10.0	
21720*	US 101/Tennant Avenue interchange improvements in Morgan Hill	$10.0	$0.0	$10.0	
21722*	Trimble Road/De La Cruz Boulevard/Central Expressway/US 101 interchange improvements	$25.0	$0.0	$25.0	
21723*	US 101/Tully Road interchange modifications	$35.0	$0.0	$35.0	
21724	Add US 101 auxiliary lane from Route 87 to Montague Expressway	$50.0	$0.0	$50.0	
21727*	Route 87/US 101 ramp connection to Trimble Road interchange	$28.0	$12.0	$16.0	Assumes $16 million in state ITIP funding
21749*	Construct Butterfield Boulevard from San Pedro Road to Watsonville Road	$21.0	$9.0	$12.0	
21753	Extend Mary Avenue from Almanor Avenue to H Street, including Route 237/US 101 overcrossing in Sunnyvale	$32.0	$12.0	$20.0	

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RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SILICON VALLEY (continued)				
21840*	San Jose-Santa Clara fourth main track and station upgrades (Phase I)	$44.0	$26.1	$17.9	Assumes $17.9 million in state ITIP funding
98175*	Widen Montague Expressway from 6 lanes to 8 lanes (adds 2 mixed flow lanes) from I-680 to US 101	$35.0	$10.0	$25.0	Allows for use of HOV lanes all day; HOV lanes in the peak periods already exist
98210*	Widen Central Expressway from 6 lanes to 8 lanes (adds 2 HOV lanes) between Route 237 and De la Cruz Avenue	$40.0	$0.0	$40.0	
98866*	Montague Expressway/Trimble flyover ramp: westbound Montague Expressway to westbound Trimble Road	$15.0	$0.0	$15.0	Non-capacity increasing improvements only; improvements at Trimble Road (flyover)
	TRANSBAY: SAN MATEO-HAYWARD AND DUMBARTON BRIDGES				
21792*	Dumbarton rail bridge rehabilitation (Santa Clara County share)	$40.0	$40.0	$0.0	Santa Clara County share funded through Measure A; companion to Alameda County project #21194 and San Mateo County project #21618. Operating plan TBD by counties.

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[2] **Track 1 Funds** refers to discretionary state and federal funds anticipated to be available over the long term of the RTP (and not already programmed in "Existing Funding").

RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SOLANO COUNTY-WIDE		
94681	Local streets and roads pavement maintenance (committed revenues shown)	$173.8	Shortfall remains (see Track 1)
21861	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$194.8	Shortfall remains
21869	Local bridge maintenance (committed revenues shown)	$23.1	Fully funded
94683	Vallejo Transit – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include system expansion)	$571.6	Federal, state and local funds (including transit fares) available directly to operator; capital shortfall remains (see Track 1)
94154	Bicycle and pedestrian projects	$16.5	Funds are from Transportation Development Act (TDA) Article 3, Bicycle Transportation Account, local TEA 21 Enhancement funds, and other programmed federal funds.
	DIABLO		
21435	Regional Express Bus Program: I-80 and I-680/Solano County to Walnut Creek BART Station	$1.4	2000 Traffic Congestion Relief Program project
21443	Regional Express Bus Program: I-680 and I-780/Solano County to Walnut Creek BART Station	$3.6	2000 Traffic Congestion Relief Program project
94150	I-80/I-680/Route 12 interchange improvements; includes connectors and auxiliary lanes between Green Valley Road and Cordelia truck weigh station (Phase 1)	$18.6	Funded in 1998 and 2000 state ITIP
	EASTSHORE-NORTH		
21341	Project development for new Fairfield/Vacaville multimodal rail station for Capitol Corridor intercity rail service in Solano County	$0.1	
21348	Install a second span along existing Green Valley Bridge to facilitate four lanes of travel way and an acceleration/deceleration lane in each direction	$16.8	
21441	Regional Express Bus Program: Vallejo/Transbay	$0.5	2000 Traffic Congestion Relief Program project
21442	Regional Express Bus Program: I-80/Solano County to Del Norte BART Station	$2.6	2000 Traffic Congestion Relief Program project
21575	Vallejo Baylink Ferry (capital cost for new passenger vessel)	$10.9	
94679	Transit centers and park-and-ride lots	$11.0	
94682	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0	Effective October 2001
	NORTH BAY EAST-WEST		
94149	Route 29/Route 37 interchange improvements in Vallejo	$65.7	Funded in 2000 state ITIP and RTIP
94675	Route 37 from Napa River Bridge to Route 29: upgrade from 2-lane expressway to 4-lane freeway (not including Route 29/37 interchange), planting, and environmental mitigation	$58.2	White Slough project; funded in 2000 state RTIP
98217	Route 12 safety improvements between Suisun City and Rio Vista (reduce bumps and dips in the roadway and extend passing lanes)	$3.0	Funded by State Highway Operation and Protection Program

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SOLANO COUNTY-WIDE				
94138	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$8.9	$0.0	$8.9	
94139	Non-MTS streets and roads pavement maintenance shortfall	$103.2	$0.0	$22.6	Shortfall remains
98509	Local streets and roads non-pavement maintenance shortfall (see Committed projects)	$125.7	$0.0	$1.0	Shortfall remains
21801	Vallejo Transit capital replacement program shortfall (see Committed projects)	$40.1	$0.0	$40.1	
98556	Transportation for Livable Communities – county program	$9.7	$0.0	$9.7	County share of regional program for community development projects linked to transportation
98565	Surface Transportation Program planning funds for the county	$3.2	$0.0	$3.2	
21809	Match for improvements to local interchanges and arterials	$10.0	$0.0	$10.0	Additional projects in Blueprint
94153*	Non-capacity increasing safety projects to improve congested intersections, local arterials and highways	$3.0	$0.0	$3.0	Additional projects in Blueprint
98168*	Solano County intercity bus service and transit hubs (capital costs)	$5.0	$0.0	$5.0	Additional projects in Blueprint
98199*	Park-and-ride lots	$3.0	$0.0	$3.0	Additional projects in Blueprint
98212*	Bicycle and pedestrian projects	$5.0	$0.0	$5.0	Additional projects in Blueprint
	DIABLO				
21807*	I-80/I-680/Route 12 interchange improvements (Phase 2)	$173.0	$38.0	$135.0	Assumes $70 million in state ITIP funding
98100*	Additional express bus service on I-680 (capital costs)	$2.1	$0.0	$2.1	Additional buses in Blueprint
	EASTSHORE-NORTH				
21817*	Vallejo intermodal ferry terminal (Phase 1)	$20.0	$10.0	$10.0	Remaining phases in Blueprint
21819*	Vallejo ferry maintenance facility	$5.0	$4.6	$0.4	
21820	Widen I-80 from 6 lanes to 8 lanes part way between Vacaville and Dixon	$20.5	$8.0	$12.5	Unfunded segment in Blueprint
94146*	Express bus service on I-80 (capital costs for additional services beyond those in Regional Express Bus Program)	$3.5	$0.0	$3.5	Needs operating funds

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		In millions of 2001 dollars			
	EASTSHORE-NORTH (continued)				
94148*	Construct rail stations, track improvements, or intermodal centers for Capitol Corridor intercity rail or commuter rail service; potential station sites are Fairfield/Vacaville, Dixon and Benicia	$10.0	$0.0	$10.0	Unfunded elements in Blueprint
94151*	Jepson Parkway (Phase 1): includes I-80/Leisure Town Road interchange improvements	$95.5	$52.5	$43.0	
98167	I-80 HOV lanes part way between I-680 and I-505 through Fairfield and Vacaville	$52.4	$0.0	$52.4	Assumes $30 million in state ITIP funding; unfunded segment in Blueprint
	NORTH BAY EAST-WEST				
21823*	Operational and safety improvements on Route 12 from Sacramento River to I-80 (Phase 1)	$34.0	$32.0	$2.0	Improvements identified in Route 12 Major Investment Study
94152	Widen Route 12 (Jameson Canyon) from I-80 in Solano County to Route 29 in Napa County from 2 lanes to 4 lanes (Solano County portion of project)	$62.4	$4.2	$58.2	Assumes $44.2 million in state ITIP funding; companion to Napa County project #94074

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RTP REFERENCE NUMBER	PROJECT/PROGRAM WITH COMMITTED FUNDING	TOTAL PROJECT COSTS	NOTES
		In millions of 2001 dollars	
	SONOMA COUNTY-WIDE		
94694	Local streets and roads pavement maintenance (committed revenues shown)	$268.0	Shortfall remains (see Track 1)
21862	Non-pavement maintenance (sidewalk, lighting, drainage, landscaping, etc. – committed revenues shown)	$208.5	Shortfall remains
21870	Local bridge maintenance (committed revenues shown)	$26.1	Shortfall remains
94695	Sonoma County, Santa Rosa, Petaluma, Healdsburg, and Cloverdale Transit – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets)	$349.2	Federal, state and local (including transit fares) available directly to operator
98572	Golden Gate Transit (Sonoma County share) – transit operating and capital improvement program (including replacement, rehabilitation, and minor enhancements for rolling stock, equipment, fixed facilities and other capital assets; does not include expansion)	$979.7	Federal, state and local (including transit fares) available directly to operators; capital shortfall remains (see Track 1)
98213	Bicycle and pedestrian projects	$15.7	Funds are from Transportation Development Act (TDA) Article 3, Bicycle Transportation Account, and local TEA-21 Enhancement funds
	GOLDEN GATE		
21338	US 101 southbound auxiliary lane between Route 116 to East Washington	$7.0	
21346	US 101/Route 116 separation: improve Route 116 onramp to southbound US 101	$9.9	Funded by State Highway Operations and Protection Program (SHOPP)
21423	Widen Commerce Boulevard from 2 lanes to 3 lanes from US 101/Wilfred Avenue interchange to Redwood Drive Golf Course in Rohnert Park	$1.0	
21436	Regional Express Bus Program: US 101/Santa Rosa to San Rafael/ San Francisco	$2.1	2000 Traffic Congestion Relief Program project
21898	US 101/Route 116 east separation: replace bridge over separation and improve onramp to US 101 (from Petaluma River bridge to north of US 101/Route 116 east separation and overhead)	$7.1	Funded by State Highway Operations and Protection Program (SHOPP)
94165	US 101 northbound and southbound HOV lanes from Route 12 to Steele Lane in Santa Rosa; includes interchange modifications at Steele Lane and College Avenue	$77.5	
94167	Sonoma-Marin Rail station site acquisitions/upgrades	$5.0	Funding is from federal earmarks for multi-modal stations.
94685	Route 12/Farmers Lane partial interchange improvements	$3.3	
94689	US 101/Arata Lane interchange improvements in Windsor (Phase 2)	$2.5	Funding is from federal earmark
96016	Reconstruct and upgrade Stony Point Road from Pepper Road to Petaluma city line	$1.4	
	NORTH BAY EAST-WEST		
21899	Rehabilitate Route 12, widen shoulders and replace bridge near Kenwood between Sonoma Creek to Boyes Boulevard	$10.5	Funded by State Highway Operation and Protection Program (SHOPP)
21998	Rehabilitate and widen Route 116 between Elphick Road to Redwood Drive in Sebastopol and Cotati	$17.0	Funded by State Highway Operation and Protection Program (SHOPP)
94691	Route 121 traffic signal system and channelization at Eighth Street	$0.4	

RTP REFERENCE NUMBER	TRACK 1 PROJECT/PROGRAM	TOTAL PROJECT COSTS	EXISTING[1] FUNDING	TRACK 1[2] FUNDS	NOTES
		In millions of 2001 dollars			
	SONOMA COUNTY-WIDE				
94155	Metropolitan Transportation System (MTS) streets and roads pavement rehabilitation shortfall (see Committed projects)	$23.1	$0.0	$23.1	
94156	Non-MTS streets and roads pavement rehabilitation shortfall	$203.2	$0.0	$131.4	Remaining shortfall to be funded in Blueprint
21901	Golden Gate Transit (Sonoma County share) capital replacement program shortfall (see Committed projects)	$23.6	$0.0	$23.6	
98557	Transportation for Livable Communities – county program	$10.6	$0.0	$10.6	County share of regional program for community development projects linked to transportation
98566	Surface Transportation Program planning funds for the county	$3.5	$0.0	$3.5	
94163	Bicycle and pedestrian projects in Countywide Transportation Plan	$40.8	$15.7	$14.9	Remaining shortfall to be funded in Blueprint
	GOLDEN GATE				
20003	North Coast Railroad Authority track maintenance and rehabilitation	$68.0	$65.0	$3.0	
98183*	Widen US 101 HOV lanes (adding an HOV lane in each direction) from Steele Lane north to Windsor/River Road; includes River Road ramp improvements and northbound and southbound auxiliary lanes	$43.0	$0.0	$43.0	
21902*	Widen US 101 (adding an HOV lane in each direction) from Rohnert Park Expressway north through Wilfred Avenue interchange; includes reconstruction of the Wilfred Avenue interchange and reconfiguring local streets	$38.4	$8.4	$30.0	
21903*	Non-capacity increasing improvements to street and road projects as identified in Sonoma County Transportation Authority Countywide Transportation Plan	$14.9	$0.0	$14.9	
21904*	Widen US 101 (adding HOV lanes in each direction) from Old Redwood Highway in Petaluma north to Rohnert Park Expressway	$27.0	$0.0	$27.0	
98147	Widen US 101 (adding an HOV lane in each direction) from Marin County line north to Old Redwood Highway in Petaluma and convert some portions from expressway to freeway	$117.4	$17.4	$100.0	Assumes $90 million in state ITIP funding; companion to Marin County project #98154
	NORTH BAY EAST-WEST				
98000	Route 37 traveler information system	$0.3	$0.0	$0.3	Improvements identified in North Bay Corridor Study
98145	Operational projects on Routes 12/116/121	$5.5	$0.0	$5.5	Improvements identified in North Bay Corridor Study

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TRANSPORTATION CONTROL MEASURES (TCMs) — INCLUDED IN 2001 FEDERAL BAY AREA OZONE ATTAINMENT PLAN

TCM NUMBER	FEDERAL TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 1	Reaffirm commitment to 28 percent transit ridership increase between 1978 and 1983 (Emission credits assumed in baseline)	MTC reaffirms measure in 1982 review of Air Quality Plan. Assess effectiveness of measure in annual reports STATUS: Completed
TCM 2	Support post-1983 improvements identified in transit operators' five-year plans and, after consultation with the operators, adopt ridership increase targets for the period 1983 through 1987	Six major transit operators adopt FY 1983–87 plans by July 1982. MTC consults with operators on ridership targets by January 1983. MTC, through implementation of the TIP and allocation of regional funds, seeks to ensure operators' five-year plans are implemented. Ridership gains are monitored through annual reports. Note: Ozone emission reductions predicted based on a 15 percent increase in transit ridership from 1982-83 to 1986-87, which did not occur. STATUS: Under federal court review
TCM 3	Seek to expand and improve public transit beyond committed levels	• MTC seeks sources of new revenue — ongoing effort. • If funding exists, transit operators implement plans to expand services. STATUS: Completed
TCM 4	Continue to support development of HOV lanes (see also TCM 20) (Emission credit based on specific projects)	MTC will continue to support HOV lanes where justified on a case-by-case basis. The following projects are ones where HOV treatments are being considered: • I-580 from Rte. 24 to Bay Bridge – Environmental Impact Statement (EIS) to be completed fall 1983, project implementation by 1987 • US 101 in Marin (Stage 2) – Negative Declaration under review, project implementation by 1986 • I-80 – EIS to be completed September 1983, project implementation unknown • Rte. 237 from Lawrence Expressway to Rte. 17 – environmental documentation under review, construction by 1984–85. STATUS: Completed
TCM 5	Support RIDES' efforts (Emission reduction included in baseline)	• MTC to reaffirm measure in 1982 review of Air Quality Plan • Effectiveness of measure assessed in annual RFP reports STATUS: Ongoing
TCM 6	Continue efforts to obtain funding to support long-range transit improvements (No emission reductions taken; implementation assumed beyond 1987)	Assuming federal funding for new rail starts: • Guadalupe – engineering design to be completed fall 1983 • BART – design of North Concord and Warm Springs extensions will begin in FY 1982–83. STATUS: Completed; TCM eliminated per EPA action
TCM 7	Preferential parking (Emission reductions assumed in baseline)	MTC reaffirms measure in 1982 review of Air Quality Plan. Caltrans to open six lots in FY 1982–83, three in FY 1983–84 and eight in FY 1984–85 STATUS: Completed
TCM 8	Shared-use park-and-ride lots	Continue the ongoing program that will establish 14 new joint-use parking lots per year Schedule is not specified. Emission credits are based on 56 lots or 1,400 spaces opening up between 1983 and 1987. STATUS: Completed
TCM 9	Expand commute alternatives	Description: Seeks to involve the private sector by encouraging employers to appoint commute coordinators who can disseminate information on commute alternatives STATUS: Completed
TCM 10	Information program for local government	Description: MTC would develop an information manual to alleviate transportation–related problems. Conduct outreach/training program during FY 1983–84 STATUS: Completed

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TRANSPORTATION CONTROL MEASURES (TCMs) — INCLUDED IN 2001 FEDERAL BAY AREA OZONE ATTAINMENT PLAN

Attachment B

TCM NUMBER	FEDERAL TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 11	Gasoline Conservation Awareness Program (GasCAP) (A carbon monoxide control strategy; no emission credit taken)	Description: GasCAP was funded by the California Energy Commission, sponsored by Caltrans, and administered by West Valley College. It entailed a training program oriented towards large vehicle fleets to teach proper trip planning, vehicle maintenance, and driving techniques. STATUS: Fully implemented; activities being carried out under a number of independent efforts.
TCM 12	Santa Clara Commuter Transportation Program (A downtown San Jose carbon monoxide control strategy)	Program consists of: • A ridesharing program • Express bus service • Park-and-ride lots • Upgrading of Southern Pacific train service • HOV lanes STATUS: Being implemented
TCM 13	Increase bridge tolls to $1.00 on all bridges	Increase bridge tolls on all state–owned bridges to $1.00 STATUS: Completed
TCM 14	Bay Bridge surcharge of $1.00	Increase Bay Bridge toll to $2.00 to discourage single-occupant automobile use and improve transit STATUS: Completed
TCM 15	Increase state gas tax by 9¢	Raise state gasoline tax from 9 cents to 18 cents per gallon STATUS: Completed
TCM 16	Implement MTC Resolution 1876, Revised — New Rail Starts Agreement (BART extension to Colma only)	This TCM only takes emission credit for the BART extension to Colma. STATUS: Completed; TCM eliminated per EPA action.
TCM 17	Continue October 1989 post–earthquake transit services	Ferry Service: preserve new ferry service initiated after the earthquake. This measure only takes emission credit for the Alameda/Oakland and expanded Vallejo ferry service initiated after the 1989 earthquake. BART: continue expanded peak–period service, including extended hours of peak service on four lines and added trains to the peak period STATUS: Completed
TCM 18	Sacramento–Bay Area Amtrak service	Implement near-term improvements recommended in ACR 132 Rail Study; emission credit is taken for three trains in each direction between Sacramento and the Bay Area. STATUS: Completed
TCM 19	Upgrade Caltrain Peninsula service	Improve existing service by: • Increasing service frequency from 52 trains to 66 trains per day • Extending service to Gilroy STATUS: Completed
TCM 20	Regional HOV System Plan	Expand HOV lane system consistent with the MTC HOV Lane Master Plan (increase HOV system to 285 lane miles) STATUS: Completed
TCM 21	Regional transit coordination	Multiple coordination initiatives are being carried out under MTC's Transit Coordination Implementation Plan, including fare and service coordination. STATUS: Ongoing
TCM 22	Expand Regional Transit Connection (RTC) services	• Expand ongoing MTC program to provide a regional clearinghouse for sale of transit tickets and increased ticket distribution • Emission credits are based on additional subsidy of employee transit tickets and increased ticket distribution. STATUS: Completed

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TRANSPORTATION CONTROL MEASURES (TCMs) — INCLUDED IN 2001 FEDERAL BAY AREA OZONE ATTAINMENT PLAN

Attachment B

TCM NUMBER	FEDERAL TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 23	Employer audits	• TCM intended to identify high visibility companies that can act as "pacesetters" or models for effective employee Commute Alternatives Programs; build networks for employers/other institutions • Review and enhance programs; provide audit reports to document results STATUS: Completed
TCM 24	Expand signal timing program to new cities	TCM established program to upgrade/retime a specific number of signals. STATUS: Completed
TCM 25	Maintain existing signal timing programs on local streets	MTC will provide technical assistance to local cities in the form of traffic monitoring, design of signal timing plans and limited hardware improvements. STATUS: Ongoing
TCM 26	Incident management on Bay Area freeways	TCM lowers emissions through reduction of incident- and accident-related delays on Bay Area freeways. Emission reductions are assumed from Caltrans' Traffic Operation System for 45–mile "Cornerstone" Project on I-880. STATUS: Completed
TCM 27	Update MTC guidance on development of local Transportation Systems Management (TSM) programs	TCM addresses the development of guidance for local governments on developing TSM programs and ordinances. Emission reductions are for the combined effects of TCM 27 and 28. STATUS: Completed
TCM 28	Local TSM initiatives	Measure accounts for effects of local governments in helping encourage and enhance effectiveness of employer–based efforts. Effects due to: • Improved quality of information on commute alternatives • Improved refinement of incentives to better match employee needs • Improved marketing campaigns • Higher level of market penetration • "Bandwagon effects" in which both employers and employees consider commute alternatives because their peers are doing so Also includes MTC preparation of a Model Trip Reduction Ordinance to be used by cities and counties for employer–based trip reduction programs STATUS: Completed
TCM A	Regional Express Bus Program	Program includes purchase of about 90 low-emission buses to operate new or enhanced express bus services. MTC will approve $40 million in funding to various transit operators for bus acquisition. STATUS: Being implemented
TCM B	Bicycle / Pedestrian Program	Fund $15 million in high-priority projects in countywide plans consistent with TDA funding availability STATUS: Will be implemented, 2003-06
TCM C	Transportation for Livable Communities (TLC)/ Housing Incentive Program	Provide $27 million in planning grants, technical assistance and capital grants to help cities and nonprofit agencies link transportation projects with community plans. STATUS: Will be implemented, 2003-06
TCM D	Additional Freeway Service Patrol	Operation of 55 lane miles of new roving tow truck patrols beyond routes that existed in 2000 STATUS: Being implemented
TCM E	Transit access to airports	Take credit for emission reductions from air passengers who use BART to SFO STATUS: Being implemented; extension under construction

TRANSPORTATION CONTROL MEASURES (TCMs) — TCMs IN STATE CLEAN AIR PLAN

Attachment B

TCM NUMBER	STATE TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 1	Support voluntary employer-based trip reduction programs	Provide assistance to regional and local ridesharing organizations; advocate legislation to maintain and expand incentives (e.g., tax deductions/credits) Provide assistance to employers, cities, counties: • In developing/enhancing employer programs; recognition of outstanding programs • Information and referral • Employer networks
TCM 2	Adopt employer-based trip reduction rule	TCM DELETED - California Health and Safety Code Sec. 40929 does not permit air districts to require mandatory employer-based trip reduction programs.
TCM 3	Improve areawide transit service	• Increase local bus service as revenues become available • Support transit improvements defined in MTC's Regional Transportation Plan that serve current or planned high-density areas with mixed land uses • Improve transit access to airports • Replace transit buses with clean-fuel buses
TCM 4	Improve regional rail service	• Implement light rail on Third Street (Bayshore Corridor) in San Francisco • Extend Caltrain to downtown San Francisco • Extend Tasman light-rail transit (12 miles, 19 stations) • BART to San Francisco International Airport • Implement light-rail on heavily patronized routes in AC Transit's service area • Implement light-rail expansion in Santa Clara County • Implement new commuter services: Santa Rosa to Larkspur, Vacaville to Oakland • Implement Fremont-South Bay rail connection
TCM 5	Improve access to rail and ferries	• Improve feeder bus service to rail and ferries • Improve bicycle and pedestrian facilities at stations and improve access to rail/ferry stations • Increase private shuttles from transit stations to employment centers • Encourage BART and Caltrain to provide preferential parking for electric vehicles
TCM 6	Improve interregional rail service	• Implement additional interregional rail service in Capitol Corridor (Auburn-Sacramento-Oakland-San Jose) • Implement commuter service between Stockton and San Jose • Expand Amtrak's San Joaquin service between Stockton and Oakland • Implement new commuter service between Santa Cruz and San Jose • Implement new daily service between the Bay Area and Eureka • Consider high-speed rail between downtown San Francisco and Los Angeles
TCM 7	Improve ferry service	• Expand ferry service to San Francisco from Vallejo (two new vessels) and Larkspur (high-speed vessel) • Implement new service from Port Sonoma to San Francisco • Implement new service between San Francisco and Oakland airports
TCM 8	Construct carpool/ express bus lanes on freeways	• Expand existing HOV network, based on MTC HOV Master Plan Update, where beneficial to air quality. Air quality analyses that include growth inducing effects of new highway capacity should be performed for each project. Special attention should be paid to express bus operations to maximize benefits for transit. • Implement HOV support facilities—park-and-ride lots, special HOV ramps that provide direct connections, HOV bypass lanes at ramp meters, express bus service • Monitor vehicle occupancy to maintain travel time advantages and stimulate increased transit use and the formation of new carpools • Convert general purpose lanes to HOV to provide significant time savings for transit

Continues on next page

TRANSPORTATION CONTROL MEASURES (TCMs) — TCMs IN STATE CLEAN AIR PLAN

TCM NUMBER	STATE TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 9	Improve bicycle access and facilities	• Improve and expand bicycle lane system by providing bicycle access in plans for all new road construction or modifications • Establish and maintain bicycle advisory committees in all nine Bay Area counties • Designate a staff person as a Bicycle Program Manager • Develop and implement comprehensive bicycle plans • Encourage transit operators to accommodate bicycles on transit vehicles, including removal of peak-hour restrictions • Encourage Caltrans to accommodate bicycles on all bridges, including the San Francisco-Oakland Bay Bridge • Encourage employers and developers to provide bicycle access and facilities (see also TCM 15) • Provide bicycle safety education
TCM 10	Youth transportation	• Encourage carpooling among students with access to cars • Replace school buses with clean-fuel vehicles • Offer transit ride discounts to youth and students • Establish special carpool formation services for parents, students and staff at Bay Area elementary and secondary schools
TCM 11	Install freeway/arterial Metro Traffic Operations System (MTOS)	• Continue and expand Freeway Service Patrol • Complete initial 45-mile segment of MTOS (MTOS includes transportation operational strategies, traffic surveillance, traffic advisory signs, incident management, ramp metering), subject to a demonstration of air quality benefits • Define and implement traffic operations system to improve the flow of traffic on the regional transportation network
TCM 12	Improve arterial traffic management	• Study signal preemption for buses on arterials with high volumes of bus traffic • Improve arterials for bus operations and to encourage bicycling and walking • Continue and expand local signal-timing programs only where air quality benefits can be demonstrated
TCM 13	Transit-use incentives	• Expand Regional Transit Connection (RTC) ticket distribution through employers, and continue "Commuter Check" program for employers to subsidize employee transit passes • Construct transit centers identified in AC Transit's Comprehensive Service Plan • TransLink® (universal fare card) on AC Transit, BART, Central Contra Costa Transit Authority, Golden Gate Transit, Livermore/Amador Valley Transit Authority and San Francisco Muni • Develop transit incident-response plan • Provide selective fare reductions: reduced off-peak fares, reduced fares for special events, reduced fares for lines with excess capacity, downtown free fare zones, etc.
TCM 14	Improve rideshare/vanpool services and incentives	• Develop long-term funding plan for Regional Ridesharing Program • Implement Traffic Management Programs that promote ridesharing and vanpooling • Explore potential demand for medium-distance (20-30 miles) vanpools and develop incentives for this market if demand exists • Explore potential demand for real-time ridesharing
TCM 15	Local clean air plans, policies and programs	• Encourage cities and counties to incorporate air-quality-beneficial policies and programs into local planning and development activities, with a particular focus on subdivision, zoning and site design measures that reduce the number and length of single-occupant automobile trips • Develop subregional planning pilot projects • Provide technical assistance to local government agencies • Publicize noteworthy examples of local clean air plans, policies and programs, as well as endorse noteworthy development projects

Continues on next page

TRANSPORTATION CONTROL MEASURES (TCMs) — TCMs IN STATE CLEAN AIR PLAN

Attachment B

TCM NUMBER	STATE TRANSPORTATION CONTROL MEASURE (TCM)	IMPLEMENTATION STEPS / STATUS
TCM 16	Intermittent control measure/public education	• Encourage public to reduce motor vehicle use and other polluting activities on predicted ozone exceedance days through "Spare the Air" program • Continue public education program to inform Bay Area residents about status of regional air quality, health effects of air pollution, sources of pollution and measures that individuals and communities can take to help improve air quality • Continue and expand the Bay Area Clean Air Partnership (BayCAP), focusing on voluntary actions by employers to improve air quality
TCM 17	Conduct demonstration projects	Promote demonstration projects to develop new strategies to reduce motor vehicle emissions. Potential projects include: • Electronic toll collection • Low-Emission Vehicle (LEV) fleets • LEV refueling infrastructure
TCM 18	Transportation pricing reform	Advocate legislation for authority to develop and promote revenue measures: • Congestion pricing on bridges • Parking cash out • Parking charges at rail stations • Regional gas tax of $0.10 • Regional gas tax of $0.50 • Regional gas tax of $2.00 • Smog-based registration fees • New vehicle "feebates" Use revenues to fund transportation alternatives, user incentives and equity programs
TCM 19	Pedestrian travel	• Review/revise general/specific plan policies to promote development patterns that encourage walking and circulation policies that emphasize pedestrian travel, and modify zoning ordinances to include pedestrian-friendly design standards • Include pedestrian improvements in capital improvements program • Designate a staff person as a Pedestrian Program Manager
TCM 20	Promote traffic-calming measures	• Include traffic-calming strategies in the transportation and land-use elements of general and specific plans • Include traffic-calming strategies in capital improvements programs

MTC has published several supplementary reports in conjunction with the 2001 Regional Transportation Plan. *These include an Environmental Impact Report, an RTP Project Notebook, and other topic-specific reports listed below. Other, previously released reports that bear on this 2001 RTP also are listed. Each of these reports is available in the MTC-ABAG Library. The reports also can be ordered via e-mail at* ***library@mtc.ca.gov****, or by contacting the MTC-ABAG Library via fax at (510) 464-7852 or by phone at (510) 464-7836.*

Final Environmental Impact Report for the 2001 RTP

MTC (December 2001)

The *Final Environmental Impact Report (EIR) for the 2001 RTP* has been prepared pursuant to the California Environmental Quality Act (CEQA) statutes. As a program EIR document, this EIR presents a regionwide, corridor-by-corridor assessment of potential impacts of the 2001 RTP. It does not evaluate site-specific impacts of individual projects, which will be analyzed in subsequent EIRs performed by project sponsors.

Areas of evaluation include: transportation; air quality; population and housing; land use; energy; geology and seismicity; noise; and biological, water, visual, and cultural resources. The potential impacts that the 2001 RTP would have on these areas and measures to mitigate the potential impacts are identified. A reasonable range of alternatives to the 2001 RTP is considered, and an environmentally superior alternative among the alternatives analyzed is identified.

The draft EIR was released for a 45-day public review period on August 10, 2001. The Commission certified the final EIR on December 19, 2001.

Regional Transit Expansion Policy: Initial Assessment

MTC (August 2001)

The Regional Transit Expansion Policy: Initial Assessment contains a detailed discussion of the Regional Transit Expansion Policy and a preliminary evaluation of candidate projects submitted as of July 2001.

A specific program of projects and related funding agreements were developed in parallel with the 2001 RTP, and adopted in Resolution 3434. The resolution identifies high-priority rail and express bus improvements to serve the region's most congested corridors, and establishes funding priorities to advance selected projects.

The Initial Assessment was discussed at public workshops held on the draft RTP.

Transportation Air Quality Conformity Analysis

MTC (February 2002)

The Transportation Air Quality Conformity Analysis is a conformity assessment of the *2001 Regional Transportation Plan* (RTP) and 2001 Transportation Improvement Program (TIP) Amendment 01-32 in accordance with the Environmental Protection Agency's air quality regulations issued August 1997 and with the Bay Area Air Quality Conformity Procedures adopted June 1998 (MTC Resolution 3075) and submitted to EPA for approval into the State Implementation Plan. In adopting the conformity analysis for TIP Amendment 01-32, this report also serves to redetermine the conformity for the entire 2001 TIP, using the latest motor vehicle emission budget from the *2001 Ozone Attainment Plan*.

RTP Project Notebook

MTC (February 2002)

The purpose of the RTP Project Notebook is to provide additional detailed technical information on proposed RTP investments for professional staff at MTC and its partner agencies, as well as other interested organizations and individuals.

The Project Notebook consists of the following seven sections:

- System Maintenance and Operations;
- Regional Transportation System Management;
- Regional Bicycle Master Plan;
- Lifeline Transportation Network;
- Committed Funding Investments by County;
- Track 1 Investments by County; and
- Blueprint Investments by County.

Public Outreach and Involvement Program – Phase 1 Summary Report
MTC (June 2001)

Public Outreach and Involvement Program – Phase II Summary Report, Appendices, Volumes I and II
MTC (December 2001)

MTC's public outreach for development of the *2001 Regional Transportation Plan* included four major components:

- Public workshops/hearings
- Interactive Web surveys
- Telephone polling
- Media outreach.

MTC conducted an extensive outreach for the 2001 RTP in two phases. The first phase consisted of more than 30 workshops that were designed to explore why citizens are drawn to support specific projects, to allow participants to discuss transportation values, needs and priorities, and to debate the merits of specific projects to be included in the RTP. The first phase also included an interactive Web survey that generated more than 1,700 responses and a telephone poll of 1,600 Bay Area registered voters. A detailed summary of this first phase effort, *Regional Transportation Plan 2001, Public Outreach and Involvement Program, Phase I Summary Report*, was prepared by MTC's RTP outreach consultant.

The second RTP public outreach phase consisted primarily of eight public workshops/hearings throughout the region and a survey on the draft 2001 RTP. Over 400 letters and e-mail comments, and nearly 200 survey responses were received. These comments and their responses are included in the *Regional Transportation Plan 2001, Public Outreach and Involvement Program, Phase II Summary Report, Appendices, Volumes I and II*, which also was prepared by the RTP outreach consultant.

Environmental Justice Report
MTC (September 2001)

MTC conducted an Equity Analysis to evaluate how low-income and minority communities fared under RTP investments. The Equity Analysis applied a series of performance measures to the RTP investment alternatives.

The analysis was developed in collaboration with the Environmental Justice Advisory Group, the Minority Citizens Advisory Committee and a host of other stakeholder groups. The analysis represented a "test" of the RTP, to ensure that no disproportionate burden is placed on low-income or minority communities. The Equity Analysis consisted of the following:

- A demographic profile of the region and identification of key minority and low-income communities of concern
- An assessment of access and mobility through the use of a travel demand model
- A definition of a "lifeline" transit network and the assessment of spatial and temporal gaps in the network for low-income people who depend on transit services
- An analysis of MTC's proposed distribution of funds in the long-range plan from an equity perspective.

Performance Measures Report
MTC (August 2001)

In a new initiative, MTC analyzed the performance of the Bay Area transportation system relative to the six RTP goals, and with regard to the RTP alternatives examined in the Environmental Impact Report. The initiative reflects a national trend that aims to better understand the benefits of transportation investments on system performance from the customer's perspective. The criteria MTC used to measure system performance include:

- Travel time
- Accessibility to jobs and shopping
- Economic efficiency
- Vehicle emissions (tons per day)
- Person trips during peak periods.

1997 High-Occupancy-Vehicle (HOV) Lane Master Plan Update
MTC (November 1997)

The HOV Master Plan Update evaluated the performance of existing HOV lanes, and made recommendations for study or implementation of new HOV lanes or other operational strategies in RTP corridors. The plan provides the basis for HOV lane investments that are included in the RTP and defines an HOV lane system that serves proposed regional express services included in MTC's Bay Area Transportation Blueprint for the 21st Century planning effort.

Caltrans' annual HOV Lane Report provides the basis for ongoing evaluation of Bay Area's HOV lane system. In addition, Caltrans, MTC and California Highway Patrol staff regularly convene a Regional HOV Lane Committee to discuss HOV lane operational, safety and enforcement issues.

MTC intends to update the HOV Master Plan in 2002.

Lifeline Transportation Network

MTC February 2002 (incorporated into the 2001 RTP by reference)

For this 2001 RTP, the Commission conducted a comprehensive assessment of the region's public transit system that identifies a Lifeline Transportation Network and the spatial and temporal gaps in that network affecting low-income communities. In response to the findings and recommendations from the Lifeline Transportation Network analysis and coordination with the RTP Social Equity analysis, MTC will provide financial support to conduct community transportation plans in 10 communities that have the highest concentrations of low-income persons in the region. These community transportation plans will be used to validate and modify if necessary the results of the Lifeline analysis at the local level. MTC will work with the transit agencies, congestion management agencies and members of the communities to identify the most effective solutions for filling the gaps identified in the Lifeline analysis.

The passage of Proposition 42 in March 2002 means the State Transit Assistance (STA) fund will generate an additional $42 million per year (beginning in fiscal year 2008–09) to Bay Area transit agencies directly and $11 million per year to the region's STA discretionary program. The Commission will consider this funding source in partnering with the transit agencies and other local partners to implement additional transportation services identified through the Lifeline Transportation Network analysis and follow-on local planning.

Bay Area Transportation Blueprint for the 21st Century

MTC's Bay Area Transportation Blueprint for the 21st Century was a major planning effort undertaken in 1999-2000 to identify, prioritize, and build consensus for future transportation investments in the region beyond those identified in the fiscally constrained 1998 RTP. MTC produced the following reports as part of this effort.

- **Project Notebook**

  MTC (October 1999; revised June 2000)

  The Project Notebook presents a comprehensive listing of all candidate projects. A fact sheet for each candidate project details the project description, background, proposed operating scenarios, estimated costs, and observations/issues specific to project implementation.

- **Evaluation Report**

  MTC (June 2000)

  The Evaluation Report assesses the impact of candidate projects on the performance of the regional transportation system. This evaluation is carried out at two levels: evaluation of packages of projects (rail, rapid bus, ferry and roads) and evaluation of individual Blueprint projects, many of which are components of the packages above.

- **Public Outreach Notebook**

  MTC (April 2000)

  The Public Outreach Notebook compiles the outreach meeting summaries and polling results into one resource document. The outreach effort involved a June 16, 1999 "kick-off" meeting, followed by a series of nine public workshops (one in each county), a regional public opinion telephone poll, and a survey of local elected officials in the Bay Area.

- **Phased Implementation Plan**

  MTC (March 2000)

  The Phased Implementation Plan distills the $33 billion worth of unfunded transportation needs in the Bay Area that are identified by the Blueprint into a $3.8 billion list of priority projects. The Plan reflects a complex mix of modes — rail, rapid bus, high-occupancy-vehicle (HOV) lane gap closures, highway interchanges and bicycles. The Plan influenced Governor Gray Davis' Traffic Congestion Relief Program (TCRP), unveiled in April 2000. In all, the TCRP sets aside more than $1.7 billion for the Bay Area.

Regional Airport System Plan

Regional Airport Planning Committee September 2000 (incorporated into the 2001 RTP by reference)

The *Regional Airport System Plan* (RASP) is prepared by the Regional Airport Planning Committee (RAPC), which is convened by the Association of Bay Area Governments, the San Francisco Bay Conservation and Development Commission, and MTC. The latest update predicts a doubling of air passenger travel by 2020 and a tripling of air cargo volumes. The plan is advisory in nature and was designed to address three major issues:

- The need for additional airport system capacity
- Regional airport system alternatives to provide this capacity
- Significant environmental tradeoffs, to the extent they are known.

The RASP focuses on the region's three commercial airports — Oakland International Airport, San Francisco International Airport, and San Jose International Airport. An update of the general aviation sector will follow later in 2002. Here are some key findings and conclusions from the plan.

- Decisions concerning future runway improvements require choices — choices between expanding runways or tolerating increasing delays in order to avoid filling the Bay.
- Forecasted growth in demand will exceed the capacity of the airport system in 2020.
- After examining a range of alternatives to construction of new runways, the analysis did not reveal a strategy for closing the gap between projected demand and available runway capacity in 2020. The Federal Aviation Administration should continue to pursue near-term measures that will help reduce delays.
- To meet reasonably expected demand and provide more reliable air transportation during good and bad weather, additional runway capacity is needed at San Francisco and Oakland airports. A more comprehensive examination of these improvements should be pursued as the most relevant course of action.
- Prior to an irreversible commitment to additional runways, all impacts on Bay resources should be evaluated. RAPC recommends that the process complete the full environmental analysis of new runway options in compliance with existing CEQA/NEPA law without special amendment.
- RAPC recommends that the plan protect future options by indicating a regional interest in civil aviation use of Travis Air Force Base and Moffett Federal Airfield if these facilities become available in the future. (These facilities are not available now, nor can their future availability be predicted). Also, the plan recognizes that the commercial airports require an effective general aviation reliever airport system for small aircraft.
- Finally, given the inherent uncertainty when discussing the future, RAPC should continue to monitor changes in the air travel market, air traffic control technology, and laws and regulation that could affect the air transportation strategies and conclusions reached in the current plan.

San Francisco Bay Area Seaport Plan

San Francisco Bay Conservation and Development Commission and MTC 1996 (incorporated into the 2001 RTP by reference)

The *San Francisco Bay Area Seaport Plan* is the product of a cooperative planning effort by BCDC and MTC. The plan provides the basis for Bay Area port policies and looks at future seaport needs and suggested improvements.

The Seaport Plan employs land-use designations and enforceable policies that BCDC and MTC use in their regulatory and funding decisions. The plan designates areas determined to be necessary for future port-related development as "port priority use areas." The Seaport Plan as amended designates 10 port priority use areas, which include the following five active seaports:

- Oakland
- San Francisco
- Redwood City
- Richmond
- Benicia.

Subsequent to its 1996 adoption, the Seaport Plan has been amended to remove the port priority use designation from the following locations:

- City of Alameda
- Encinal Terminals (in Alameda)
- portion of Oakland Army Base.

San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard

Association of Bay Area Governments, Bay Area Air Quality Management District, MTC (Adopted October 2001)

This plan sets out a strategy for the Bay Area to attain the national 1-hour ozone standard. Ozone, or, more commonly, "smog," is harmful to humans and property. The Bay Area exceeds the standards a few days a year on hot summer afternoons, usually in the inland valleys. (Livermore has the highest ozone levels.)

The Ozone Plan is prepared by the Bay Area Air Quality Management District, Association of Bay Area Governments, and MTC and then submitted for review and approval by the California Air Resources Board and the US Environmental Protection Agency. The new 2001 Ozone Plan represents the latest set of commitments for stationary, area and transportation control measures to ensure the Bay Area attains the national standard by 2006.

The Ozone Plan also provides a transportation emissions "budget" that is used to determine the conformity of this RTP and MTC funding programs with air quality objectives. The emissions budget is essentially the sum of all the projected emissions from cars, buses, and trucks in the region for a particular attainment year. The conformity analysis is prepared as a separate report, available for public review, that not only analyzes transportation emissions but tracks the implementation status of all the transportation control measures in the Ozone Plan.

For the latest Ozone Plan, MTC reviewed a range of new transportation control measures, eventually including several new measures and several measures for further study as shown in Attachment B.

Regional Bicycle Master Plan

MTC February 2002 (incorporated into the 2001 RTP by reference)

MTC developed the Regional Bicycle Master Plan in conjunction with each of the nine Bay Area counties, other planning partners and advocacy groups.

The completed regional bike plan accomplishes five main goals. The plan:

- Defines a network of regionally significant bicycle routes, facilities and necessary support programs
- Identifies gaps in the networks and recommends specific improvements to fill these gaps in the system
- Develops cost estimates to build out the entire regional network
- Outlines a funding strategy to implement the regional bike network
- Identifies other programs to help local jurisdictions to become more bicycle-friendly.

The RTP-related plans described in this Attachment are available for review in the MTC-ABAG Library or online at ***www.mtc.ca.gov.***

The Ozone Plan can be viewed online at the Air District Web site: ***www.baaqmd.gov/planning/2001sip/2001sip.htm****.*

AMENDMENT TO
SAN FRANCISCO BAY AREA
2001 REGIONAL TRANSPORTATION PLAN

RTP STRATEGY TO INCREASE REGIONAL TRANSIT RIDERSHIP

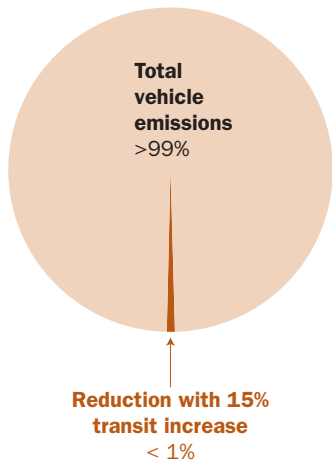
Metropolitan Transportation Commission
November 20, 2002

TCM 2 and the Federal Air Quality Plan

The federal Clean Air Act requires regions to prepare State Implementation Plans (SIPs) to demonstrate compliance with federal ambient air quality standards. Since 1982, the Bay Area's SIP has included certain measures called transportation control measures (TCMs) to reduce automobile emissions. A total of 26 TCMs — including improved transit service and transit coordination, new carpool lanes, signal timing, freeway incident management, and increased state gas tax and bridge tolls — have been carried out to help reduce regional ground-level ozone ("smog") and are now largely completed.

The 1982 Air Quality Plan included TCM 2, a measure intended to reduce emissions by improving the productivity of Bay Area transit systems. The emission reduction estimates in TCM 2 were based upon projections that, with the funding of productivity improvements in the 1983-87 Short Range Transit Plans of six major transit operators, regional transit ridership would increase by 15 percent from 1982-87. These reductions equate to a 0.4 percent reduction in vehicle emissions and an even smaller (0.1 percent) reduction in total emissions from all sources (see Figure 1).

Figure 1
Expected Reductions In Vehicle Emissions With 15% Transit Ridership Increase



Source: Bay Area Air Quality Management District, MTC

Despite continued heavy investment in transit productivity measures, system and service expansion, and system operations, regional transit ridership, measured in terms of annual boardings, remains below the level associated with a 15 percent increase over the 1982-83 baseline.

The emissions reductions associated with TCM 2, however, were achieved many years ago, through a combination of TCM 2 implementation itself and through the implementation in 1990-91 of the Contingency Plan in the 1982 Air Quality Plan. In the latter process MTC adopted sixteen "contingency" TCMs that more than compensated for the shortfall in emissions reductions of the original ten TCMs in the 1982 Air Quality Plan, including TCM 2.

The text of TCM 2 appears in Appendix A.

Federal District Court Order

The federal court has interpreted TCM 2 to mean that MTC has a separate SIP obligation to achieve a 15 percent transit ridership increase. The Court's Order Granting Injunctive Relief, dated July 19, 2002 (the "Order"), requires that:

By no later than November 9, 2006, MTC shall increase regional ridership to at least 544.8 million annual boardings. This figure reflects a 15 percent increase over the 1982-83 baseline of 473.7 million annual boardings.

Within six months of the date of the Order [i.e., by January 19, 2003], MTC must amend the *2001 Regional Transportation Plan* (RTP) to include a section specifying how it will achieve full implementation of TCM 2. In this amendment, MTC shall identify and describe all projects it will fund as part of its strategy for achieving the required ridership increase. Each project description must include an implementation schedule, estimated costs, and expected ridership gains.

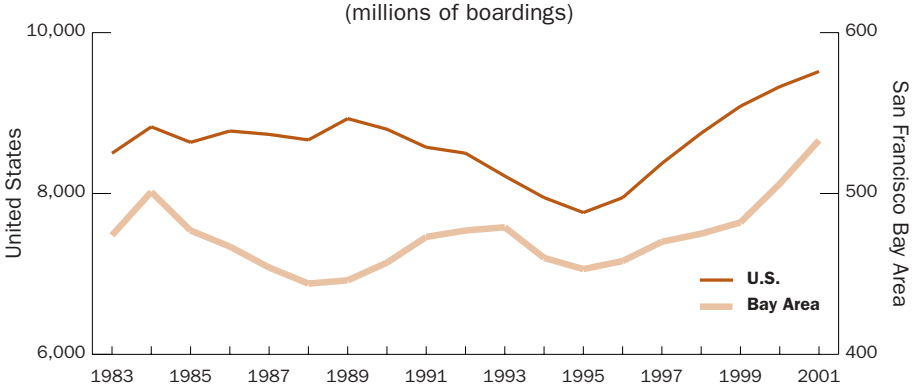
The Order further provides that if additional projects that are not in the Transportation Improvement Program (TIP) are needed to meet the ridership target, MTC must amend the TIP to ensure these projects can proceed. The Order also notes that "Because MTC contends that the RTP already contains sufficient projects to achieve the ridership increase, it should not … be burdensome for MTC to prepare the required RTP amendment." MTC has therefore responded to the Court Order by amending the 2001 RTP to set forth the specific list of projects that are expected to contribute to full achievement of TCM 2.

MTC will appeal the judgment in the case in which the Order was issued. While the appeal is pending and the Order is in effect, MTC has prepared this report to serve as the basis for the court-mandated RTP amendment. The conclusion of this report is that the implementation of the 2001 RTP is projected to result in the achievement of the ridership increase target by 2006, and that a TIP amendment is not needed to obtain the projected ridership increase by that time.

Transit Ridership and Investment Trends

Transit trends in the Bay Area are quite similar to national transit trends (see Figure 2). Given the well-developed Bay Area transit system, repeated studies have shown that demand-side factors such as personal choice, the state of the economy, patterns of development controlled by county and municipal governments, and the cost of gasoline exert a much more powerful influence on regional transit use and market share than supply-side funding decisions. These demand-side factors are not under the control of either MTC or the transit operators.

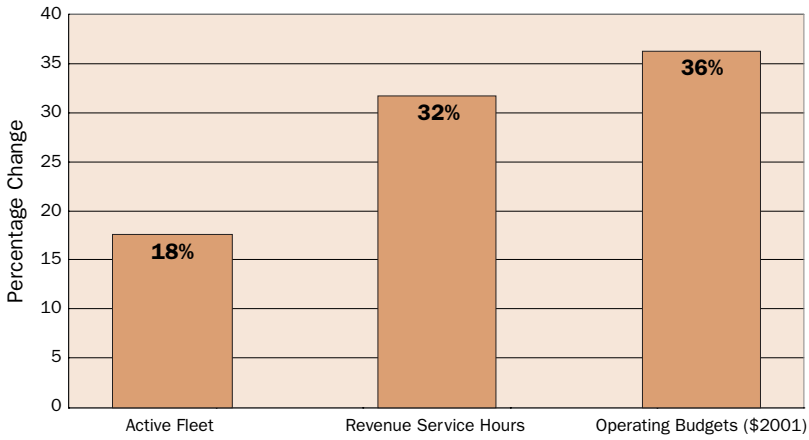
Figure 2
Transit Ridership in the United States and the San Francisco Bay Area
(millions of boardings)



Source: American Public Transportation Association, MTC

However, these external forces have not deterred MTC and its transit partners from making a strong and continuing regional investment in transit, which is evidenced by three different measures: size of the transit fleet, growth in revenue hours of service, and growth in the size of transit operating budgets. As shown below in Figure 3, all three of these measures of transit service and investment have grown at rates exceeding 15 percent, but ridership growth has not followed at the same pace due to the countervailing pressure of the factors cited above.

Figure 3
All SF Bay Area Operators, Percentage Change in Operating Statistics Between 1982–83 and the Present (2000–01)

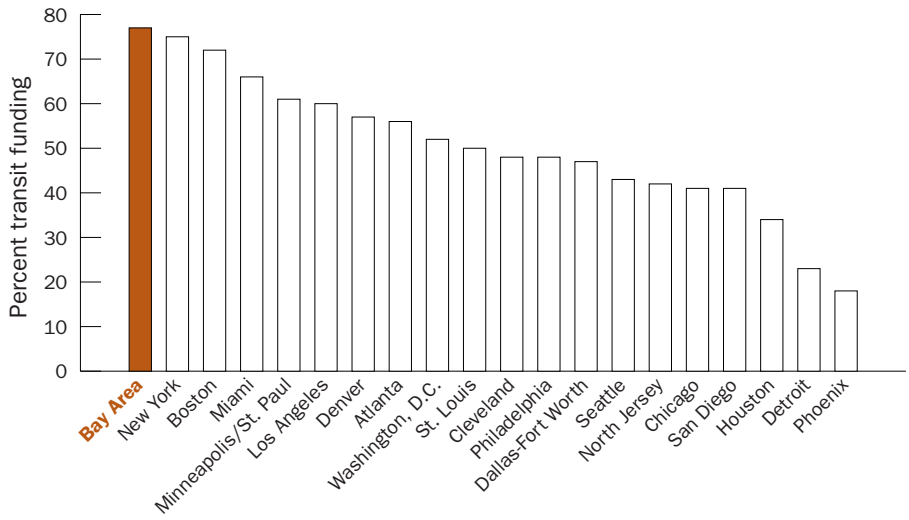


Source: MTC

Further looking ahead over the next 25 years, MTC's 2001 RTP commits 77 percent of all projected transportation funding to public transportation. In fact, MTC's plan shows a larger percentage of transportation dollars being spent on public transportation than any other large metropolitan area in the nation (see Figure 4). The magnitude of this share is particularly striking in light of the fact that only about 6 percent of daily trips are made on transit in the Bay Area.

Figure 4

Transit Spending as Percent of Funding in Long-Range Transportation Plan



Source: Federal Highway Administration (FHWA)

Recent Events

Concurrent with the latest economic expansion starting in the mid-90's, Bay Area transit ridership began to grow steadily, culminating in a peak level of 533 million annual riders by the end of fiscal year 2000–01. This represented a 12.5 percent increase over the FY 1982–83 TCM 2 baseline number of 473.7 million annual riders (see Figure 5). Since then, recession-related effects, exacerbated by the events following September 11, 2001, have led to fewer jobs and fewer people taking transit (and other transportation modes) for work and other trips. The Bay Area Economic Forum (BAEF) estimates that Bay Area employers shed more than 140,000 net jobs in 2001. The BAEF notes that this was the biggest loss of jobs experienced in the Bay Area in 25 years. The Association of Bay Area Governments estimates that Santa Clara County alone lost almost 43,600 jobs between 2001 and 2002.

Ridership for FY 2001–02 shows that there was a 2.6 percent decline from FY 2000–01, producing a regional total of 519 million riders. This figure is now 9.6 percent above the FY 1982–83 baseline levels. This decline in transit travel is also mirrored on the highway system, where traffic volumes have dropped as well. Caltrans' Year 2001 Bay Area Congestion Data Information Memorandum shows decreases in regional freeway travel as

Figure 5

Transit Ridership Statistics
FY 1982–83 to Present

[Thousands of Annual Riders]

Fiscal Year

Six Major Operators	1982–83	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02
AC Transit	76,794	75,086	68,767	67,257	64,438	57,224	61,308	62,041	62,500	65,625	66,280	62,754	61,943	64,153	63,303	63,877	66,089	68,088	71,529	69,520
BART	57,700	62,792	66,036	63,270	60,304	61,160	61,738	74,761	76,193	77,247	77,626	80,183	78,952	79,593	83,446	81,422	86,488	97,024	103,919	97,146
GGBHTD	12,267	10,736	10,811	9,997	9,435	9,082	8,784	9,938	10,530	10,574	10,597	10,578	10,255	10,447	10,962	11,032	11,108	11,465	11,618	10,799
SamTrans	17,599	18,242	19,871	19,114	18,292	18,048	18,130	18,324	19,114	18,793	18,619	19,742	19,675	19,085	18,562	18,834	18,350	17,925	18,136	18,745
SF Muni	293,100*	313,100*	264,033	255,924	252,122	244,733	235,794	233,468	239,340	238,714	238,295	220,273	216,409	214,468	217,631	219,507	217,050	226,181	236,205	234,303
SCVTA	34,868	38,522	34,609	38,089	36,299	35,895	39,447	41,200	45,850	46,118	46,700	45,224	45,166	49,172	53,062	53,547	54,996	55,701	58,160	54,430
SUBTOTAL	**492,328**	**518,478**	**464,127**	**453,651**	**440,890**	**430,506**	**430,497**	**439,732**	**453,527**	**457,071**	**438,754**	**432,400**	**432,235**	**436,918**	**446,966**	**448,219**	**454,281**	**476,384**	**499,567**	**484,943**
Other Operators																				
Caltrain	4,866	5,160	5,305	5,458	5,422	5,596	5,622	6,351	7,200	7,400	7,500	6,924	7,028	6,127	7,040	8,632	8,622	8,735	9,925	9,942
CCCTA	2,550	3,037	3,432	3,800	3,781	3,725	3,765	4,062	4,221	4,248	4,255	4,649	3,898	4,180	4,525	4,287	4,533	4,694	4,991	4,807
Vallejo	1,100	1,026	1,009	1,124	1,044	1,217	1,606	1,758	2,104	2,304	2,300	2,455	2,529	2,766	3,140	3,442	3,714	3,903	3,626	3,573
Other	1,915	2,263	2,714	2,787	2,873	3,233	4,380	5,397	6,007	6,363	6,813	6,752	6,998	7,660	8,357	9,620	11,036	12,389	14,929	15,782
SUBTOTAL	**10,431**	**11,486**	**12,460**	**13,169**	**13,120**	**13,771**	**15,373**	**17,568**	**19,532**	**20,315**	**20,868**	**20,780**	**20,453**	**20,733**	**23,062**	**25,981**	**27,905**	**29,721**	**33,471**	**34,104**
TOTAL	**502,759**	**529,964**	**476,587**	**466,820**	**454,010**	**444,277**	**445,870**	**457,300**	**473,059**	**477,386**	**478,985**	**459,534**	**452,853**	**457,651**	**470,028**	**474,200**	**481,986**	**506,105**	**533,038**	**519,047**

* Muni ridership over-predicted for these years. Federal District Court has confirmed Muni's FY 1982–83 ridership to be 264 million.

Notes: 1) 2001–02 numbers are from individual transit operators and will be used to update the National Transit Database.

2) 2000–01 is latest data from National Transit Database, except for Altamont Commuter Express, Capitol Corridor, and Oakland AirBART.

3) FY 1988–89 to FY 1999–00 numbers are from MTC's *Statistical Summary of Bay Area Transit Operators* and include paratransit riders.

4) FY 1982–83 to FY 1987–88 numbers are from various sources, including TDA reports by operators and FTA–UMTA data.

5) "Other" includes: Alameda–Oakland Ferry, Benicia, Dixon, Healdsburg, Fairfield–Suisun, Napa Transit, Petaluma, Rio Vista, Santa Rosa, Sonoma, LAVTA, Tri-Delta, Union City, Vacaville, WestCAT, Capitol Corridor, Altamont Commuter Express, and Oakland AirBART.

well, leading to an overall 12 percent decrease in the region's daily hours of delay. The biggest delay reductions, ranging from 40 percent to 75 percent, occurred in San Mateo and Santa Clara counties, which were hit the hardest when high technology jobs disappeared. These freeway delay reductions have the compounding effect of making automobile use more attractive compared to often slower transit options.

Transit Ridership Estimates for 2006

Transit ridership projections in the 2001 RTP are based upon forecasting work performed by MTC in 2000 and 2001, using MTC's state-of-the-art travel demand model known as BAYCAST. This model — or earlier versions thereof — is the same model that MTC has used and continues to use in performing approved conformity assessments of RTPs and TIPs under both federal transportation conformity regulations and previous court-approved conformity assessment procedures. The BAYCAST forecasts supporting the 2001 RTP, in turn, use demographic and economic projections developed by the Association of Bay Area Governments (ABAG). Using these forecasts and interpolating for the year 2006, one may project that regional transit ridership will reach a level of 598 million annual boardings, well in excess of the target level of 544,800,000 boardings mandated in the Order, provided that the projects and investments identified in the RTP are implemented on schedule and the underlying economic and demographic model assumptions are borne out over the next few years.

Travel demand models such as BAYCAST are most valuable in the context of longer-term planning and forecasting. They are less helpful in predicting ridership over very near-term periods, because of the speed with which the forecasting assumptions can change. Recent demographic and economic changes directly influence near-term mode choices; some forecasting variables change on a daily basis, such as gas prices at the pump. Furthermore, MTC will be required to perform a new travel demand forecast for use in the next major RTP revision, which under federal law MTC must adopt by March 2005. However, this new forecast will not be complete before the Court's January 2003 deadline for this RTP amendment.

In the absence of a planning tool such as MTC's travel demand model, it is possible to make "off-model" adjustments to long-term forecasts by making reasonable assumptions regarding the impact on travel behavior of recent events (i.e., events occurring since the last ABAG demographic and economic projections) and of reports of current trends in factors affecting transportation mode choice. Although federal law does not mandate that MTC project travel behavior (including transit usage) more frequently than once every three years, and although the Order does not specifically require MTC to engage in such an exercise, the report examines appropriate adjustments to the projections in the 2001 RTP based upon recent events and trends.

It is important to note that regional transit ridership estimates must be generated through a regional travel model, such as BAYCAST, which has been validated against observed transit operator ridership data. Such models take into account the synergies between transit operators, the impact of boarding on one system on boardings of another, and in general the regional impacts of individual projects. The ridership estimates for individual projects are at best related only indirectly to regional transit ridership, as such estimates do not take into account: (a) the impacts of an individual project on utilization of other transit services, either positive or negative, (b) the impacts of individual projects on the transportation system as a whole, and vice-versa, and (c) the regional demographic and economic trends and other factors influencing actual and projected regional transit ridership, all of which MTC assumes in developing forecasts regarding use of the transit system on a regionwide basis. As a result, when it comes to regional transit ridership projections, there is little if any forecasting value in individual project ridership estimates.

Thus the most credible way to forecast how close regional ridership will be to the target in 2006 is to start with existing forecasts and to make reasonable adjustments to these forecasts in light of current events and very recent trendline data.

According to recent measures, the Bay Area's economy appears to be entering a slow recovery. The Bureau of Labor Statistics show that job losses in the Bay Area have slowed significantly between the fourth quarter of 2001 and the first quarter of 2002 (down from -5 percent to only about -0.3 percent). ABAG predicts that beyond 2002, economic and demographic growth will begin to return to historical rates, with net jobs growing at about 1 percent to 2 percent per year over the next few years.

Any improvements to transit service over the next few years will be "on the margin" of an already extensive transit system already in operation. This system is the product in large part of long-term planning and advocacy by MTC in previous years. Introducing new projects today, moreover, is unlikely to impact transit ridership by 2006 due to the time required to develop, fund and implement these projects. Fortunately, because of years of MTC planning and because the Governor and Bay Area voters have approved new transportation revenues, a number of transit projects will come to fruition prior to 2006 and are expected to help support further increases in ridership growth. Transit projects already in the pipeline and under construction will increase peak-period transit capacity in the Bay Area by a healthy 23 percent by 2006, compared to the system that existed in 1998.

The result of MTC's effort to re-examine likely transit ridership levels by 2006 in light of recent events is the projection of a range of transit boardings by that year. Both ends of this range assume that the projects in the 2001 RTP are implemented on schedule.

2001 RTP Forecasts (High Estimate)

The RTP forecasts prepared prior to the economic downturn most likely provide the high end of expected regional transit ridership. These forecasts used ABAG's Projections 2000 demographic data and are the forecasts that were the basis for the 2001 RTP development. The forecasts include all the transit investments to be operational by 2006. They are MTC's official forecasts until formally revised. Under the RTP forecasts, transit levels would reach 598 million annual riders in 2006. The assumptions and methodology for those forecasts are discussed in the *Final Transportation Air Quality Conformity Analysis* (February 2002) report for the 2001 RTP and for TIP Amendment 01-32.

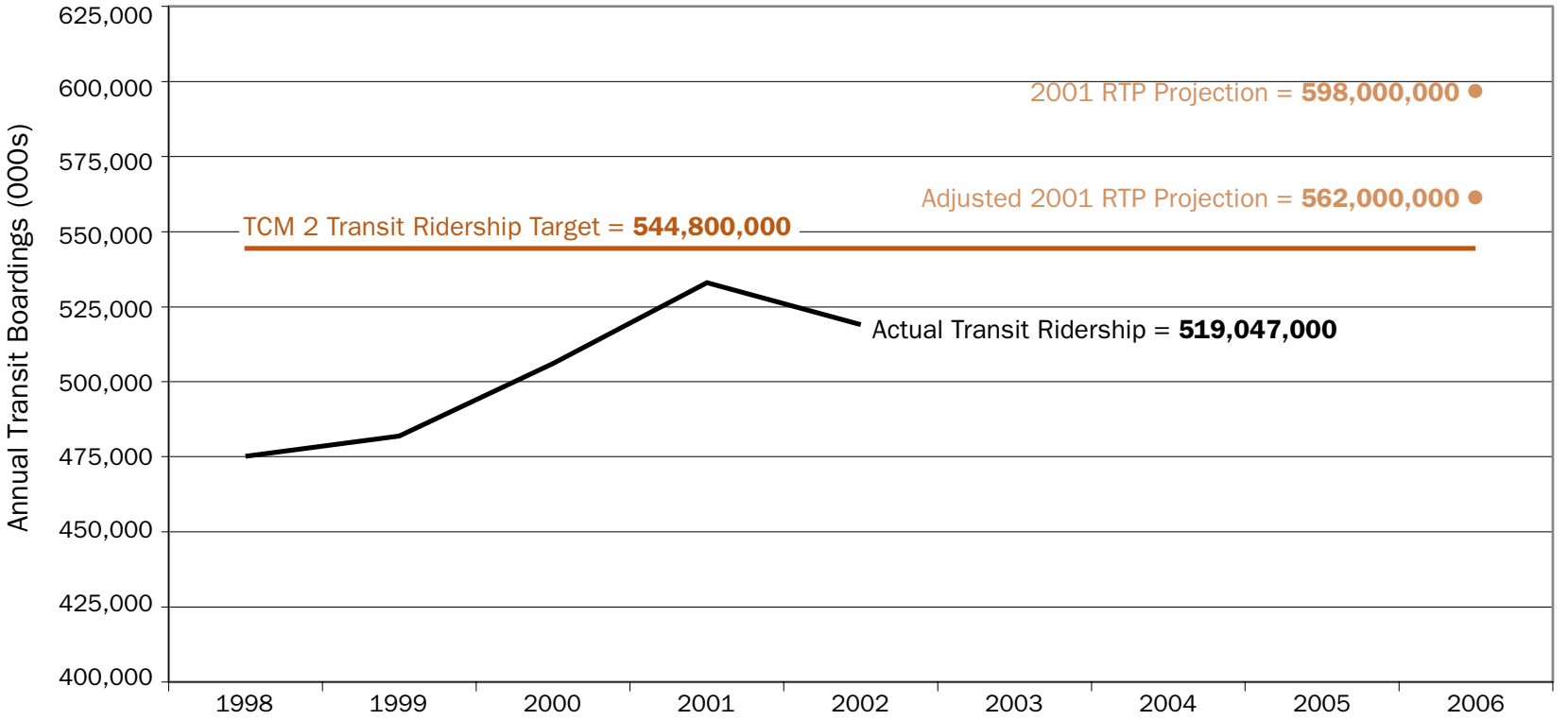
Adjusted Estimate (Low Estimate).

To account for recent dramatic changes in economic conditions and the resulting impact on transit ridership, MTC used a previously prepared 2005 travel demand forecast that, though updated from the forecast used in preparing the 2001 RTP, still relies on ABAG Projections 2000. This forecast was modified to reflect preliminary FY 2001–02 regional transit ridership information MTC received before it obtained formal data from the transit operators. This preliminary information suggested a decline in ridership from FY 2000–01 on the order of 7 percent. MTC then extrapolated on a linear basis the transit ridership projection for 2005 to 2006, the year that includes the court-imposed target achievement date of November 9, 2006. These adjustments yield an alternative projection that, with the implementation of the RTP on schedule, there will be an estimated 562 million annual riders in FY 2005–06, or 6 percent below the high range estimate in the RTP.

These forecasts are compared in Figure 6. As shown in the chart, both forecasts exceed the court-ordered TCM 2 ridership target.

Since the "low range" estimate was developed, MTC has obtained ridership data from the operators which demonstrates that the actual decline in ridership from FY 2000–01 to FY 2001–02 was only about 2.6 percent (from about 533 million boardings to about 519 million). Thus MTC continues to expect future ridership will be between the low and high range.

Figure 6
Bay Area Transit Ridership, 1998–2006



Description of Projects MTC Will Fund as Part of Strategy to Increase Ridership

The Order requires MTC to identify projects it will fund to achieve the mandated 15 percent ridership increase.

The funding is accomplished through the federally required Transportation Improvement Program (TIP), a comprehensive listing of all Bay Area transportation projects that receive federal funds or that are subject to a federal approval. The TIP is where funds are programmed to implement the policies, projects, and programs contained in the RTP. Projects in the TIP must first be included in the RTP. Transportation improvements included in the RTP and TIP are derived from a variety of planning efforts at the city, county, transit operator, regional and state levels. These include projects from county congestion management programs, countywide transportation plans, county-level transportation sales tax expenditure plans, transit operator short-range transit plans, and the state highway planning process conducted by Caltrans. When a project's purpose, scope, and budget are fully developed, the project may be proposed for funding.

A draft of the 2003 TIP was released for public review and comment in May 2002. Although the TIP was ready for approval in July, MTC could not adopt it because a "Stay Order" by U.S. Court of Appeals for the Ninth Circuit suspended the U. S. Environmental Protection Agency's (EPA) approval of the motor vehicle emissions budget in the region's ozone attainment plan and caused a "conformity lapse". That budget is necessary for MTC to conform the TIP to the federal air quality plan as required by EPA's transportation air quality regulations. MTC approved an Interim 2003 TIP in October 2002 to keep as many transit projects on schedule as possible during the conformity lapse. MTC will approve a full 2003 TIP when the stay is lifted.

To further support these transit improvements, the TIP includes funding for a number of new and innovative programs being developed by MTC that will better serve the transit customer and make their transit trip more convenient and reliable. These include TransLink®, Regional Transit Trip Planning, Commuter Check, and ridesharing services.

Transit Projects in the TIP

Table 1 provides project descriptions, estimated costs, year of completion and expected ridership increases for selected transit projects that are in the current TIP; the table is sorted by year of project completion to show the order in which projects will be coming on line. With respect to ridership gains for individual projects, MTC does not customarily estimate ridership for each transit project and program in the Bay Area. However, this information is usually available from project sponsors, when it can be estimated. Therefore, MTC has obtained this information to the extent possible from project sponsors, and has estimated ridership for many smaller projects using reasonable planning assumptions. The ridership information, which provides the year with respect to which the ridership estimate applies, is included with the other Table 1 information.

High-Occupancy Vehicle (HOV) Lane Projects in the TIP

Table 2 shows the HOV lanes in the TIP that are likely to be operational by 2006. The table also shows the number of new and existing express routes that will use these programmed HOV lanes. The HOV lanes will contribute to increased transit ridership since express bus travel times will be reduced further than what they are today with the new lanes. MTC estimates that the new lanes would increase ridership approximately 6 percent on these express bus routes.

Other MTC Programs That Support Transit Ridership Gains

There are a number of ongoing MTC programs that support the greater use of public transit; however, it is difficult to associate specific transit ridership gains with these programs due to the diverse nature of the services and markets affected. General descriptions of these programs follow:

Transit Management Program

MTC adopted a *Transit Coordination Implementation Plan* in February 1997 to address the requirements of SB 1474. This plan puts high priority on projects that will provide improvements to passengers in the near term, benefit the largest numbers of transit users, improve productivity (which was the focus of TCM #2), and enhance the ability of transit riders to reach destinations.

Table 1

Transit Improvement Projects in the Interim 2003 TIP

(in order of year completed)

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 $)	FISCAL YEAR PROJECT STARTS[1]	FISCAL YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year)[2]
VTA	Line 22 Rapid Bus Corridor; purchase 32 buses	Line 22 Rapid Bus Corridor: purchase 32 buses (FTA Bus (8); CMAQ (12), STP (12))	$24,000	2000-01	2002-03	212,000 (2004)
AC Transit	Purchase 15 buses (San Pablo Ave.)	Alameda County: San Pablo Avenue; purchase 15 buses.	$8,560	2002-03	2002-03	3,000,000 (2004)
BART	BART Extension to the San Francisco International Airport (SFO)	Extend BART from Colma station to SFO and Millbrae	$1,476,764	1998-99	2002-03	9,100,000 (2006)
CCCTA	2-3 Expansion Buses	Puchase 2-3 expansion buses to serve Bishop Ranch.	$618	2001-02	2002-03	75,000 (2003)
CCCTA	3 Expansion Buses	Purchase three express buses for Walnut Creek/Dublin BART to Bishop Ranch.	$950	2001-02	2002-03	90,000 (2003)
Martinez	Martinez Amtrak Station – new station, parking and landscaping	Martinez; Amtrak Station; new station, parking, bus bays, with landscape, signal and crossing improvements.	$27,460	1999-00	2002-03	50,000* (2004)
Vacaville	Leisuretown Park-and-Ride Lot/ Transit Station	Contruct 100-150 space lot and provide for transit service	$300	2002-03	2002-03	40,000* (2003)
AC Transit	San Pablo Corridor Transit System	San Pablo Corridor Transit System Improvements - project includes street improvements, bus shelters and vehicle purchase	$1,130	2000-01	2003-04	3,000,000 (2004)
BART	Pittsburg/Bay Point Station – expand parking and improve lighting	BART: Pittsburg/Bay Point Station; various access improvements to station including adding 300-400 additional parking places, lighting, and other access improvements.	$4,012	2002-03	2003-04	100,000* (2004)
Caltrain	Caltrain Express/Rapid Rail	Add passing tracks, improve signaling and purchase additional rail cars; expand service.	$206,989	2000-01	2003-04	3,400,000 (2004)
Fairfield	Fairfield Transportation Center – Phase II	Fairfield: Fairfield Tranportation Center; construct approximately 180 automobile parking spaces.	$3,053	2002-03	2003-04	30,000* (2004)
LAVTA	Purchase 4 New Buses for Expanded Service	Purchase 4 new buses for service that will provide an alternative for commuters that travel along the I-680 Sunol Corridor.	$1,200	2003-04	2003-04	70,000 (2004)
Vacaville	Bella Vista Park-and-Ride Lot/ Transit Station	Contruct 100-150 space lot and provide for transit service.	$1,691	2002-03	2003-04	40,000* (2004)
Vallejo	Vallejo Baylink Ferry	Vallejo: Baylink Ferry Service between Vallejo & San Francisco; purchase 300- to 350-passenger vessel for the fleet.	$10,879	2003-03	2003-04	150,000 (2004)
VTA	Zero-Emission Bus Demonstration Project	SCVTA: Acquire up to six 40-foot Low-Floor Zero Emissions expansion buses.	$4,093	2002-03	2003-04	225,000 (2004)

(continued on next page)

* Indicates projects whose ridership gains would not be reflected in MTC's travel demand model results and therefore would contribute additional riders to travel model-produced forecasts.

[1] Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.

[2] Refer to TIP for details and updates on project milestones

Table 1 (continued)

Transit Improvement Projects in the Interim 2003 TIP

(in order of year completed)

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 $)	FISCAL YEAR PROJECT STARTS[1]	FISCAL YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year)[2]
VTA	TasmanEast/ Capitol Corridor Light Rail Extension	Extends Tasman light rail line east to Milpitas and south along Capitol Expressway to San Jose.	$495,218	1998-99	2003-04	2,200,000 (2005)
Alameda Co.	Dublin/Pleasanton BART Parking Expansion	Dublin/Pleasanton BART Station: construct or acquire approximately 338 additional parking spaces.	$3,390	2002-03	2004-05	212,000* (2002)
BART	Fruitvale Transit Village Project	Oakland: Fruitvale BART Station; construct a 3-5 story parking structure, new surface lots, intermodal facility, improve or replace existing surface parking & construct pedestrian plaza.	$14,252	1999-00	2004-05	100,000* (2005)
Caltrain	Caltrain Parking Lot Improvements	Provision of approximately 100 parking spaces at various Caltrain stations in San Mateo County.	$1,130	2003-04	2004-05	25,000* (2005)
Fairfield	Fairfield/Vacaville Train Station	Construct new train station and parking lot for intercity rail service.	$4,575	2004-05	2005-06	160,000* (2005)
Fairfield	North Texas Local Transfer Facility	Fairfield: North Texas Street; construct local bus transfer facility.	$1,750	2002-03	2004-05	30,000* (2005)
Fremont	Capitol Corridor Centerville Station	Capitol Corridor at Centerville Station – construct 73-space parking spaces, landscaping, sidewalks, lighting (final phase).	$1,265	2003-04	2004-05	12,000* (2005)
Hercules	Hercules Train Station Project	Construct a train station along San Pablo Bay within the City of Hercules city limit	$6,050	2003-04	2004-05	15,000* (2004)
Marin Co.	Marin Parklands Visitor Access Improvements	Expand Mazanita Park-and-Ride by 80 spaces and provide shuttle service to national parks.	$6,907	2003-04	2004-05	30,000* (2005)
LAVTA	Livermore Valley Center Park-and-Ride Parking Structure	Livermore: Downtown Livermore ACE train station; construct parking structure of up to 540 spaces for transit users.	$8,519	2002-03	2004-05	104,000* (2006)
BART	BART Richmond Station Additional Parking	Richmond: Richmond BART station; construct an additional level on the parking structure. Project provides about 120 new parking spaces.	$8,800	2002-03	2005-06	31,000* (2006)
BART	West Dublin Station	Add new West Dublin Station and various parking improvements.	$11,000	2004-05	2005-06	1,400,000 (2006)
Dixon	Dixon Multimodal Transportation Center	Dixon: B Street, adjacent to the UPRR tracks; construct building for commuter support services and future intercity rail service.	$440	2003-04	2005-06	96,000* (2005)

(continued on next page)

* Indicates projects whose ridership gains would not be reflected in MTC's travel demand model results and therefore would contribute additional riders to travel model-produced forecasts.

[1] Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.

[2] Refer to TIP for details and updates on project milestones

Table 1 (continued)

Transit Improvement Projects in the Interim 2003 TIP

(in order of year completed)

SPONSOR	PROJECT NAME	PROJECT DESCRIPTION	PROJECT COST (000 $)	FISCAL YEAR PROJECT STARTS[1]	FISCAL YEAR PROJECT COMPLETED	ESTIMATED ANNUAL RIDERSHIP (forecast year)[2]
Emeryville	Emeryville Intermodal Transfer Station: Phase 1	Emeryville: at the Emeryville Amtrak intercity rail station; construct the first phase of the intermodal transfer station. Including a parking garage and bus terminals.	$8,230	2003-04	2005-06	50,000* (2006)
MUNI	SF Muni Third Street LRT Extension: Phase I	San Francisco: Muni; design and construct new light rail line along the eastern side of San Francisco. Phase I.	$860,105	2001-02	2005-06	12,500,000 (2006)
MTC/ Transit Operators	Regional Express Bus Program	Purchase buses and provide operating funds to expand express bus service in selected corridors.	$40,000	2003-04	2005-06	4,900,000 (2006)
Vacaville	Commuter Buses Purchase	Vacaville: Purchase three over-the-road commuter coaches for service between Fairfield/Vacaville and Sacramento.	$905	2004-05	2005-06	50,000 (2005)
VTA	Vasona Light Rail Extension	Extends light rail from San Jose Diridon station to downtown Campbell.	$342,000	2000-01	2005-06	2,300,000 (2005)
Vallejo	Vallejo Ferry Terminal Intermodal Facility	Vallejo: Baylink Ferry Terminal; construct new intermodal facility, including additional parking, upgrade of bus transfer facilities, and improvement to pedestrian access.	$25,589	2005-06	2006-07	50,000* (2006)
Sonoma County Transit	Petaluma Intermodal Transportation Center	Petaluma: Petaluma Intermodal Transportation Center on Copeland between Washington and D street; construct new intermodal station/transit mall.	$1,378	2002-03	2003-04	17,000* (2006)

* Indicates projects whose ridership gains would not be reflected in MTC's travel demand model results and therefore would contribute additional riders to travel model-produced forecasts.

[1] Adding numbers would not be consistent with MTC's regional transit ridership estimates, as explained in the text.

[2] Refer to TIP for details and updates on project milestones

Table 2

Impact of Freeway HOV lanes on Regional Express Bus Ridership

HOV LANE PROJECT AND ASSOCIATED EXPRESS BUS SERVICE	NUMBER OF EXPRESS BUS ROUTES SERVED	PEAK DIRECTION TRAVEL TIME SAVINGS RANGE
I-80 Contra Costa – Route 4 to Carquinez Bridge (westbound only)	7	5% to 30%
I-80 Alameda – Toll Plaza to Powell St. (eastbound flyover)	9	19% to 31%
I-680 Alameda – Sunol Grade (northbound)	7	10% to 17%
I-680 Contra Costa – Marina Vista to Route 242	4	8% to 14%
Route 84 Alameda – Dumbarton Bridge Approach	2	17% to 21%
I-880 Alameda – Route 262 to County Line	1	3%
Route 4 Contra Costa – Railroad to Standard Oil	1	3%
Route 87 Santa Clara – Julian to Route 85	1	7%
US 101 Marin/Sonoma – San Rafael Gap Closure/Steele Lane to Rohnert Park	23	5% to 11%
Total Express Bus Ridership Increase: 6.1%		

Two of the projects described here, TransLink® and Transit Trip Planning, are critical elements of the Transit Coordination Plan. The projects add convenience for passengers connecting between multiple operators and planning new trips on transit.

TransLink®

One of the key regional approaches for improving public transit is the development of a universal transit ticket program. The universal transit ticket program will establish a single regional system for collecting fares on all of the Bay Area's transit systems. The objectives of the program are to: 1) improve passenger convenience in making inter- and intra-agency trips; 2) improve the efficiency and security of the region's fare collection systems; 3) improve transit system data collection for service planning purposes and development of fare policies; and 4) take advantage of revenue-enhancing or cost-saving business partnerships with the private sector.

As lead agency for the TransLink® project, MTC is responsible for the procurement of equipment and services necessary to support an initial demonstration, evaluation of the demonstration and eventual full regional implementation. TransLink®'s demonstration phase was completed in July 2002. Full rollout among the region's largest transit agencies is expected by 2006.

Regional Transit Information System

MTC and the region's transit operators are currently developing and implementing a system of transit information services designed to make it easier for transit users to plan trips throughout the Bay Area. Currently, the general public is able to access route, schedule, and fare information on all Bay Area transit agencies at the "817-1717" regional telephone number and <transitinfo.org> Web site; the regional telephone number will transition to the new nationwide "511" number in December 2002. Transit users also are able to use the Internet to access TakeTransit℠, a system that provides point-to-point transit itineraries for any transit trip on or between AC Transit, ACE, BART, Caltrain, CCTA, Emery Go-Round, Muni, Union City Transit, Tri-Delta Transit, WestCat, and ferries. Over the next year, it will expand to cover all of the major transit agencies in the region.

Regional Rideshare Program

The Regional Rideshare Program's objective is to provide information to the public on alternative transportation modes, such as carpools, vanpools, mass transit and other transportation alternatives. The program accomplishes this primarily by:

- providing information about transportation alternatives to driving alone;
- providing services through an automated ridematching system to support the use of carpools and vanpools;
- providing information that promotes the use of carpool and Park-and-Ride facilities;
- conducting region-wide marketing campaigns and outreach efforts to the public and employers.

Transportation for Livable Communities (TLC)/Housing Incentive Program (HIP)

MTC created a special initiative called the Transportation for Livable Communities (TLC) Program in 1998 to fund and support the planning and development of small-scale transportation investments that meet community needs throughout the Bay Area. The TLC program's primary goal is to support transportation projects that: 1) have been developed through a collaborative and inclusive planning process; 2) encourage pedestrian, transit and/or bicycle trips; 3) provide for compact development of housing, downtowns, and regional activity centers; 4) are part of a community's development or redevelopment activities; and 5) enhance a community's mobility, identity and quality of life.

Under the newly created Housing Incentive Program, cities and counties are eligible to receive transportation funds for capital projects when proposing housing developments adjacent to major transit service. Research has shown that residents are more likely to use public transit if they live within walking distance of a transit station. MTC acted to triple the annual funding level for the TLC/HIP programs in the 2001 RTP.

MTC Policy Initiatives That Will Help Increase Transit Ridership

MTC is on record through letters to key legislators and the Commission's legislative program supporting initiatives that will positively impact the demand for transit service, including support for:

- increasing bridge tolls to $3;
- peak-period pricing on the San Francisco-Oakland Bay Bridge, which will shift some trips to transit; and
- indexing federal and state gas taxes to produce more transportation revenues and keep the cost of transit competitive with the cost of driving.

MTC will continue to pursue these topics and their implementation over the next year.

Longer Term RTP Investments

Because major transportation projects often take years to develop, it is also important to look beyond 2006 to see the larger view of the region's commitment to transit. The 2001 RTP identifies about $68 billion in funding for transit, or about 77 percent of the projected $87 billion in available transportation funding over the next 25 years; this commitment supports the 2000 Census data that shows the Bay Area has the third highest transit mode share for work trips in the nation.

The RTP includes:

- funds to operate the existing transit system;
- funds to replace and rehabilitate the existing transit system;
- a major new transit expansion program for the Bay Area (see Resolution 3434 discussion below);
- a number of miscellaneous other transit improvements (Appendix B).

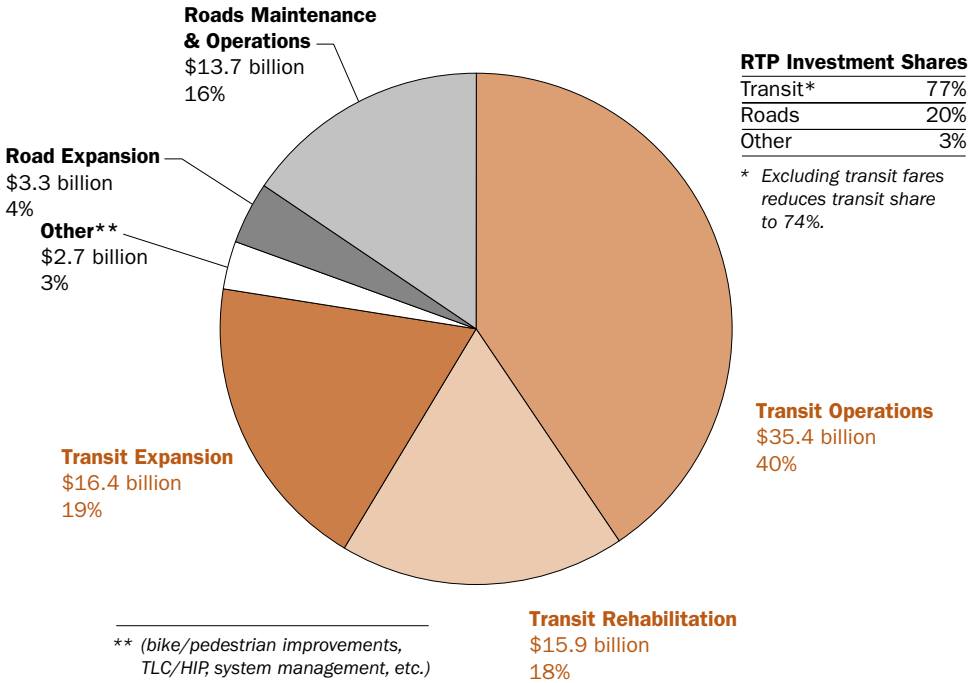
The allocation of RTP funds to transit is broken down in Figure 7, which divides the $87 billion into "Committed" funds (over which MTC has little or no discretion as to their use) and "Track 1" funds (over which MTC has considerable discretion). The pie chart in Figure 8 shows how the transit funds themselves are divided in the RTP among operating, rehabilitation and expansion needs.

Regional Transit Expansion Program – MTC Resolution 3434

A hallmark transportation initiative, consummated in the 2001 RTP, was the development of regional consensus on the next generation of major transit projects in the Bay Area. Known by its MTC resolution number, the Resolution 3434 agreement represents an $11 billion program of rail and express bus projects that will be implemented over the next 25 years. Resolution 3434 superseded the 1988 New Rail Starts Program (MTC Resolution 1876) that resulted in the construction of such extensions as the BART extensions to Pittsburg/Bay Point, Dublin and the San Francisco International Airport (scheduled to open early next year), the Tasman light rail extension in Santa Clara County and the San Francisco Muni Metro light rail extension to China Basin.

The ability of an individual transit operator to provide expanded service depends on whether the operator can access funds that can be used for new guideways/vehicles and whether there is sufficient funding available to operate the new service over an extended period of time. For services described above in the Resolution 3434 section, the transit operators will have funds to operate these services. A number of Resolution 3434 projects will be implemented just beyond the 2006 deadline. A listing of the Resolution 3434 project costs, implementation year and ridership estimates are shown in Table 3.

Figure 7
2001 Regional Transportation Plan
Total Expenditures
$87.4 Billion

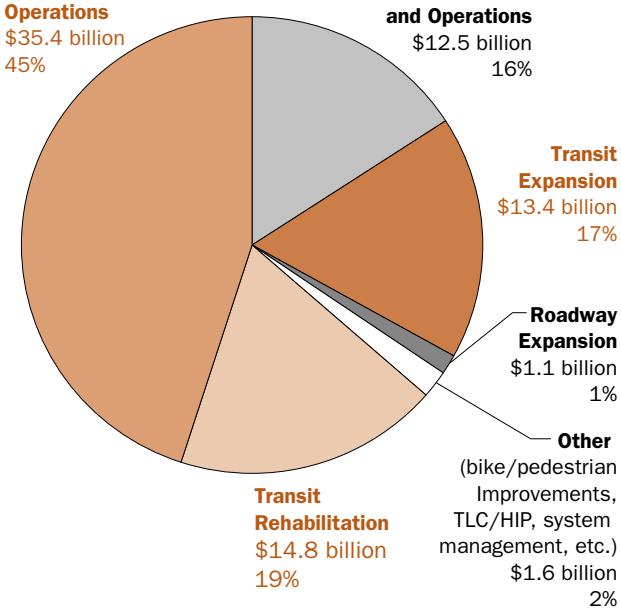


RTP Investment Shares

Transit*	77%
Roads	20%
Other	3%

* *Excluding transit fares reduces transit share to 74%.*

Committed Funds
$78.8 billion



Track 1 Funds
$8.6 billion

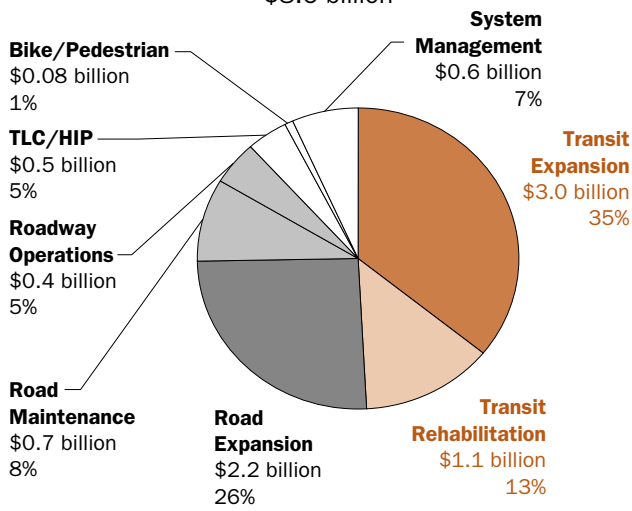
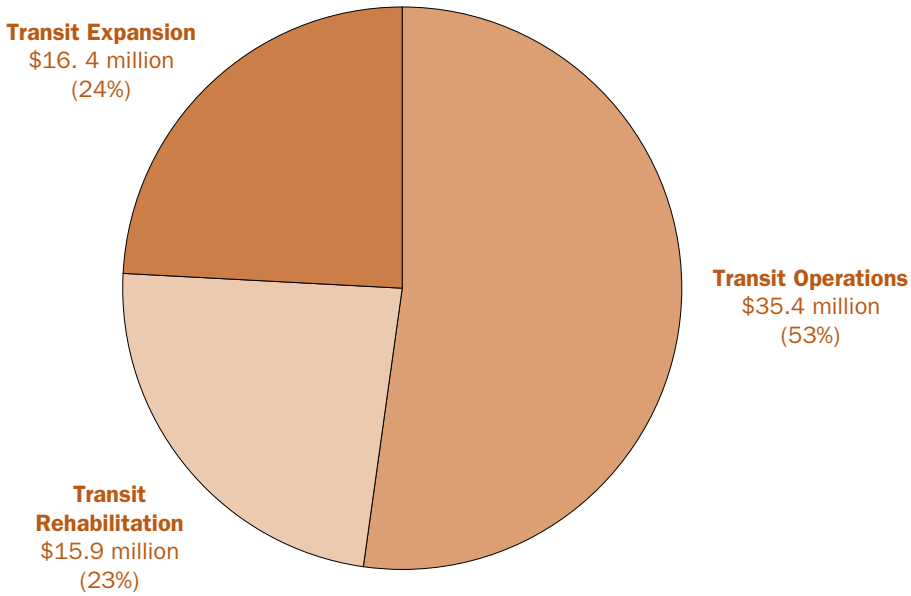


Figure 8
2001 Regional Transportation Plan
Total Transit Expenditures
$67.7 billion



Other Track 1 Transit Investments in the RTP

In addition to the Resolution 3434 projects, there are a number of additional transit commitments in Track 1 of the RTP that are described in Appendix B. The appendix provides project descriptions, costs and estimated completion dates for RTP committed and Track 1 projects. As with the Resolution 3434 projects above, it is important to note that there are a significant number of transit projects coming on line between 2006 and 2010 that will help support increases in the region's transit ridership.

Summary/Conclusions

The 2001 RTP, as implemented in the near term through the TIP, provides the foundation for achieving the court-mandated 15 percent ridership increase target on the schedule required in the Order.

Table 3
MTC Resolution 3434: Recommended Program of Projects

PROJECT	COST (millions of 2001 $)	YEAR OPERATIONAL	ANNUAL NEW RIDERS (2020)**
BART: Fremont to San Jose	$4,344	2012	18,180,000
MUNI Third Street Light Rail: Phase 2–Central Subway	$647	2012	1,550,000
BART/Oakland Airport Connector	$232	2008	4,151,000
Caltrain Downtown Extension/Rebuilt Transbay Terminal	$1,885	2010	5,662,000
Caltrain Rapid Rail/Electrification	$602	2008	1,490,000
Caltrain Express: Phase 1	$127	2004*	3,367,000
Downtown to East Valley: Light Rail and Bus Rapid Transit: Phases 1 and 2	$518	2008	2,066,000
Capitol Corridor: Phase 1 Expansion	$129	2010	673,000
AC Transit Oakland/San Leandro Bus Rapid Transit: Phase 1 (Enhanced Bus)	$151	N/A	2,487,000
Regional Expess Bus (Phase 1)	$40	2004*	N/A
Dumbarton Rail	$129	2008	328,000
BART/East Contra Costa Rail Extension	$345	N/A	N/A
BART/Tri-Valley Rail Extension	$345	N/A	N/A
Altamont Commuter Express (ACE): service expansion	$121	N/A	N/A
Caltrain Express: Phase 2	$330	N/A	N/A
Capitol Corridor: Phase 2 Expansion	$284	N/A	N/A
Sonoma-Marin Rail	$200	N/A	550,000
AC Transit Enhanced Bus: Hesperian/Foothill/MacArthur corridors	$90	N/A	N/A
TOTAL	**$10,519**		

N/A: Not available

Studies (outside of the RTP)

PROJECT	COST (millions of 2001 $)
Napa/Solano Passenger Train Study	$0.4
BART: 30th/Mission Station Study	$0.5
TOTAL: Studies	**$0.9**

* Included in TIP list (Table 1)
** Includes only riders that did not previously use transit for a trip; this represents a smaller subset of transit boardings than are reported in Table 1.

Appendix A

TRANSPORTATION CONTROL MEASURE #2

(Reprinted from the 1982 *Air Quality Plan*)

RTP STRATEGY TO INCREASE REGIONAL TRANSIT RIDERSHIP

TCM #2: Support post-1983 improvements identified in transit operator's 5-year plans, after consultation with the operators adopt ridership increase target for 1983-1987.

EMISSION REDUCTION ESTIMATES: These emission reduction estimates are predicated on a 15% ridership increase. The actual target would be determined after consultation with the transit operators.

	1983	1984	1985	1986	1987	
HC:	0	.23	.42	.60	.72	tons/day
CO:	0	2.03	4.03	5.80	7.15	
NO_x:	0	.36	.68	.94	1.04	

COST: Costs of maintaining the existing level of services is currently programmed in regional allocations. Ridership increases would come from productivity improvements, thus additional costs would be moderate.

IMPLEMENTATION SCHEDULE:

- o 6 major transit operators adopt FY 1983-87 plans by July, 1982
- o MTC consults with operators on ridership targets by Jan., 1983
- o MTC, through implementation of the TIP and allocation of regional funds, seeks to ensure operators' 5-year plans are implemented
- o Ridership gains are monitored through annual RFP reports

DESCRIPTION OF CONTROL MEASURE:

This measure is basically an extension of TCM #1. Since federal funds for transit purposes are being cut back, many of the improvements identified in the 5 year plans deal with increased productivity. Thus, while the size of the transit system may not grow significantly, the ridership is expected to increase.

OTHER IMPACTS

- o 31,600 gallons of gasoline saved.
- o Alternatives to automobile travel will be increased.

Appendix B

LIST OF 2001 RTP PROJECTS THAT SUPPORT FUTURE REGIONAL TRANSIT RIDERSHIP GROWTH— COMMITTED* AND TRACK 1 PROJECTS

(*Not included in the TIP)

2001 RTP – COMMITTED AND TRACK 1 PROJECTS*

Alameda County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21465	Transit enhancements funded by transit center development funds	$2.1
21570	Livermore Valley Center Parking Structure	$8.5
21992	AC Transit bus corridor improvements	$20.0
94029	Altamont Commuter Express (ACE) rail service operating and station/track improvements (four roundtrips daily)	$11.0
94524	Amtrak Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21111	Capitol Corridor mitigation for track work at Jack London Square	$25.0
21118	MacArthur BART Station intermodal transit village (includes replacement parking)	$100.0
21123	Union City Intermodal Station (Phase 2), includes 19 bus bays and a kiss and ride loop road	$5.9
21131	BART-Oakland International Airport connector	$232.0
21132	BART extension to Warm Springs	$634.9
21136	Rapid Bus Transit (RBT) in Oakland/Berkeley/San Leandro corridor (Phase 1)	$151.2
21138	San Leandro BART Station transit village (Phase 1); includes parking structure, kiss-and-ride and bus improvements	$10.9
21149	Express bus services	$4.0
21357	Capitol Corridor Phase 1 expansion (for 16 daily round trips)	$126.0
21885	BART/Tri-Valley Rail Extension (for right-of-way acquistion)	$80.0

*See *Final 2001 RTP Project Notebook* (February 2002) for more detailed project information.

2001 RTP – COMMITTED AND TRACK 1 PROJECTS*

Contra Costa County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21213	Pittsburg/Bay Point BART Station parking & lighting improvements (400 new spaces)	$2.6
94555	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento, and 7 round trips daily between San Jose and Oakland)	$66.0
94561	Transit service for elderly and disabled riders	$32.4

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21207	Martinez Intermodal Terminal Facility (Phase 3 initial segment): 200 interim parking spaces (includes site acquisition, demolition and construction)	$6.0
21208	Richmond Parkway Transit Center (Phase 1): includes signal reconfiguration/timing, new 700-800 space parking facility, and security improvements at Hilltop park-and-ride lot	$15.0
21209	Hercules Transit Center relocation and expansion	$6.0
21211	BART/East Contra Costa Rail Extension (right-of-way acquisition)	$95.0
94045	New express buses for I-80 HOV service (capital costs)	$16.9
98157	AC Transit enhanced bus service in San Pablo Avenue corridor in Contra Costa County: new passenger stations, roadway geometric improvements, information kiosks	$8.5
98197	Richmond intermodal transfer station (BART to Amtrak/Capitol Corridor)	$23.6

Marin County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
98200	Sonoma-Marin Rail station site acquisitions/upgrades	$0.6

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21303	Local Marin bus service enhancements (capital only)	$41.9
21308	Expand Manzanita park-and-ride lot	$10.7

*See *Final 2001 RTP Project Notebook* (February 2002) for more detailed project information.

2001 RTP – COMMITTED AND TRACK 1 PROJECTS*

Napa County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
94076	Trancas intermodal facility in the city of Napa	$0.8

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21402	Napa-to-Fairfield fixed-route transit (capital costs)	$1.8

San Francisco

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21572	San Francisco International Airport BART extension	$1,476.8
21573	Muni F-Embarcadero extension	$14.4
94637	Expansion of paratransit door-to-door van and taxi service to comply with Americans With Disabilities Act (ADA)	$61.0

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21342	Caltrain Downtown Extension/Transbay Terminal Replacement	$1,885.0
21508	Bus Rapid Transit Program	$26.0
21509	Caltrain electrification from San Francisco to Gilroy	$602.0
21510	Third Street Light Rail Transit extension to Chinatown (Central Subway)	$647.0
21544	Balboa Park BART Station expansion (planning phase only)	$2.4

San Mateo County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21574	San Mateo Downtown Transit Center	$6.9
94667	SamTrans Americans With Disabilities (ADA) services	$737.7

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21343	Caltrain Downtown Extension/Transbay Terminal Replacement	$1,885.0
21627	Caltrain electrification from San Francisco to Gilroy	$602.0

*See *Final 2001 RTP Project Notebook* (February 2002) for more detailed project information.

2001 RTP – COMMITTED AND TRACK 1 PROJECTS*

Santa Clara County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21760	Double track Caltrain between San Jose and Gilroy	$170.0
21770	Caltrain extension to Salinas/Monterey (capital funds)	$36.0
21787	Palo Alto Intermodal Transit Center (Phase I)	$50.0
21790	Altamont Commuter Express Upgrade	$46.0
21797	Route 17 bus service improvements	$2.0
21922	San Jose International Airport connections to Guadalupe LRT	$200.0
21923	Bus Rapid Transit corridor: Stevens Creek Boulevard	$30.0
94117	Transit centers and park-and-ride lots	$10.0
94617	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0
98121	Increase Caltrain service from San Jose to Gilroy, includes Caltrain corridor facilities and service improvements	$136.7
98138	Acquisition of railroad corridor for future Silicon Valley Rapid Transit Corridor project	$80.0
98201	100 low-floor light rail vehicles: 50 new vehicles and 50 replacement vehicles	$270.0

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21344	Caltrain Downtown Extension/Transbay Terminal Replacement	$1,885.0
21769	Caltrain electrification from San Francisco to Gilroy	$602.0
21840	San Jose-Santa Clara fourth main track and station upgrades (Phase I)	$44.0
21921	BART Extension from Warm Springs to San Jose	$3,710.0

*See *Final 2001 RTP Project Notebook* (February 2002) for more detailed project information.

2001 RTP – COMMITTED AND TRACK 1 PROJECTS*

Solano County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21575	Vallejo Baylink Ferry (capital cost for new passenger vessel)	$10.9
94682	Capitol Corridor intercity rail service (9 round trips daily between Oakland and Sacramento and 7 round trips daily between San Jose and Oakland)	$66.0

Track 1

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
21817	Vallejo intermodal ferry terminal (Phase 1)	$20.0
21819	Vallejo ferry maintenance facility	$5.0
94146	Express bus service on I-80 (capital costs for additional services beyond those in Regional Express Bus Program)	$3.5
94148	Construct rail station, track improvements, or intermodal centers for Capitol Corridor intercity rail or commuter rail service; potential station sites are Fairfield/Vacaville, Dixon and Benicia	$10.0
98100	Additional express bus service on I-680 (capital costs)	$2.1

Sonoma County

Committed

RTP REFERENCE NUMBER	PROJECT / PROGRAM	TOTAL PROJECT COST
94167	Sonoma-Marin Rail station site acquisitions/upgrades	$5.0

*See *Final 2001 RTP Project Notebook* (February 2002) for more detailed project information.

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